

# CPC COOPERATIVE PATENT CLASSIFICATION

## C12Y ENZYMES

### NOTES

1. This subclass covers all enzymes.
2. In this subclass, each enzyme is classified according to their EC number of the "Enzyme Nomenclature" (as valid on 1 January 2012) recommended by the Nomenclature Committee of the International Union of Biochemistry and Molecular Biology. The EC number appears in the subgroups in parenthesis and is reflected in the classification symbol: the EC number with the notation a.bb.cc.ddd is rendered into a CPC symbol [C12Y](#) ABB/CCDDD (with no trailing zeroes at the end) where:
  - EC a.bb.cc.ddd: a ranges from 1 – 6; CPC symbol: A = 1 – 6
  - EC a.bb.cc.ddd: b ranges from 1 – 99 (\*); CPC symbol: B = 01 – 99
  - EC a.bb.cc.ddd: c ranges from 1 – 99 (\*); CPC symbol: C = 01 – 99
  - EC a.bb.cc.ddd: d ranges from 1 – 400 (\*); CPC symbol: D = 001 – 400
  - (\*) not all numbers are usedExamples:
  - Alcohol dehydrogenase: EC 1.1.1.1. is classified in [C12Y 101/01001](#)
  - Togavirin: EC 3.4.21.90 is classified in [C12Y 304/2109](#)
  - Hepsin: EC 3.4.21.106 is classified in [C12Y 304/21106](#)
  - Cobaltochelataze: EC 6.6.1.2 is classified in [C12Y 606/01002](#)
3. This subclass is for discretionary supplementary classification of subject matter already classified as such in other classification places, e.g.:
  - [A01N 1/00](#): Compositions containing enzymes and use of the compositions and compounds for preservation of bodies of humans or animals or parts thereof
  - [A01N 3/00](#): Compositions containing enzymes and use of the compositions and compounds for preservation of plants or parts thereof
  - [A01N 63/00](#): Biocides, pest repellents or attractants or plant growth regulators containing enzymes
  - [A21D 10/00](#), [A21D 13/00](#) : Bakery products which may contain enzymes
  - [A23](#): Foods or foodstuffs containing enzymes
  - [A61K](#): Preparations for medical dental or toilet purposes containing enzymes
  - [A61K 31/7088](#): Medical preparations containing nucleic acids encoding enzymes
  - [A61K 48/00](#): Medical preparations containing genetic material encoding enzymes which is inserted into cells of the living body to treat genetic diseases; Gene therapy
  - [A61L 12/082](#): Methods or apparatus for disinfecting or sterilising contact lenses in combination with enzymes
  - [A61L 15/38](#): Bandages, dressings or absorbent pads for physiological fluids containing enzymes
  - [A61L 27/3683](#): Material for prostheses subjected to enzyme treatment prior to implantation
  - [C07K 14/81](#): Protease inhibitors
  - [C07K 16/40](#): Antibodies against enzymes
  - [C11D 3/386](#): Detergent compositions containing enzymes
  - [C12C 1/00](#): Preparation of malt
  - [C12M](#): Apparatus for enzymology
  - [C12N 9/00](#): Enzymes
  - [C12N 11/00](#): Carrier-bound or immobilised enzymes
  - [C12N 13/00](#): Treatment of enzymes with electrical or wave energy
  - [C12N 15/00](#): Nucleic acids encoding (part of) enzymes
  - [C12N 15/113](#), [C12N 15/8281](#) Non-encoding nucleic acids modulating the expression of genes for enzymes
  - [C12P](#): Preparation of compounds using enzymes
  - [C12Q 1/00](#): Measuring or testing processes involving enzymes; Compositions therefor; Processes of preparing such compositions
  - [G01N 33/573](#): Immunoassays for enzymes
4. Specific classification rules for the allocation of [C12Y](#) symbols together with any of the groups listed above, are specified within the relevant group, if available.
5. The classification symbols of this subclass are not listed first when assigned to patent documents.

<b>101/00</b>	<b>Oxidoreductases acting on the CH-OH group of donors (1.1)</b>	101/01004	. . R,R-butanediol dehydrogenase (1.1.1.4)
101/01	. with NAD <sup>+</sup> or NADP <sup>+</sup> as acceptor (1.1.1)	101/01005	. . Acetoin dehydrogenase (1.1.1.5) ( <a href="#">C12Y 101/01303</a> , <a href="#">C12Y 101/01304</a> takes precedence)
101/01001	. . Alcohol dehydrogenase (1.1.1.1)		
101/01002	. . Alcohol dehydrogenase (NADP <sup>+</sup> ) (1.1.1.2), i.e. aldehyde reductase	101/01006	. . Glycerol dehydrogenase (1.1.1.6)
101/01003	. . Homoserine dehydrogenase (1.1.1.3)	101/01007	. . Propanediol-phosphate dehydrogenase (1.1.1.7)
		101/01008	. . Glycerol-3-phosphate dehydrogenase (NAD <sup>+</sup> ) (1.1.1.8)

101/01009	. . D-Xylulose reductase (1.1.1.9), i.e. xylitol dehydrogenase	101/01059	. . 3-Hydroxypropionate dehydrogenase (1.1.1.59)
101/0101	. . L-Xylulose reductase (1.1.1.10)	101/0106	. . 2-Hydroxy-3-oxopropionate reductase (1.1.1.60)
101/01011	. . D-Arabinitol 4-dehydrogenase (1.1.1.11)	101/01061	. . 4-Hydroxybutyrate dehydrogenase (1.1.1.61)
101/01012	. . L-Arabinitol 4-dehydrogenase (1.1.1.12)	101/01062	. . 17Beta-estradiol 17-dehydrogenase (1.1.1.62)
101/01013	. . L-Arabinitol 2-dehydrogenase (1.1.1.13)	101/01064	. . Testosterone 17-beta-dehydrogenase (NADP+) (1.1.1.64)
101/01014	. . L-Iditol 2-dehydrogenase (1.1.1.14), i.e. sorbitol-dehydrogenase	101/01065	. . Pyridoxine 4-dehydrogenase (1.1.1.65)
101/01015	. . D-Iditol 2-dehydrogenase (1.1.1.15)	101/01066	. . Omega-hydroxydecanoate dehydrogenase (1.1.1.66)
101/01016	. . Galactitol 2-dehydrogenase (1.1.1.16)	101/01067	. . Mannitol 2-dehydrogenase (1.1.1.67)
101/01017	. . Mannitol-1-phosphate 5-dehydrogenase (1.1.1.17)	101/01069	. . Gluconate 5-dehydrogenase (1.1.1.69)
101/01018	. . Inositol 2-dehydrogenase (1.1.1.18)	101/01071	. . Alcohol dehydrogenase [NAD(P)+] (1.1.1.71)
101/01019	. . Glucuronate reductase (1.1.1.19)	101/01072	. . Glycerol dehydrogenase (NADP+) (1.1.1.72)
101/0102	. . Glucuronolactone reductase (1.1.1.20)	101/01073	. . Octanol dehydrogenase (1.1.1.73)
101/01021	. . Aldehyde reductase (1.1.1.21), i.e. aldose-reductase	101/01075	. . (R)-Aminopropanol dehydrogenase (1.1.1.75)
101/01022	. . UDP-glucose 6-dehydrogenase (1.1.1.22)	101/01076	. . (S,S)-Butanediol dehydrogenase (1.1.1.76)
101/01023	. . Histidinol dehydrogenase (1.1.1.23)	101/01077	. . Lactaldehyde reductase (1.1.1.77)
101/01024	. . Quinate dehydrogenase (1.1.1.24)	101/01078	. . Methylglyoxal reductase (NADH-dependent) (1.1.1.78)
101/01025	. . Shikimate dehydrogenase (1.1.1.25)	101/01079	. . Glyoxylate reductase (NADP+) (1.1.1.79)
101/01026	. . Glyoxylate reductase (1.1.1.26)	101/0108	. . Isopropanol dehydrogenase (NADP+) (1.1.1.80)
101/01027	. . L-Lactate dehydrogenase (1.1.1.27)	101/01081	. . Hydroxypyruvate reductase (1.1.1.81)
101/01028	. . D-Lactate dehydrogenase (1.1.1.28)	101/01082	. . Malate dehydrogenase (NADP+) (1.1.1.82)
101/01029	. . Glycerate dehydrogenase (1.1.1.29)	101/01083	. . D-Malate dehydrogenase (decarboxylating) (1.1.1.83)
101/0103	. . 3-Hydroxybutyrate dehydrogenase (1.1.1.30)	101/01084	. . Dimethylmalate dehydrogenase (1.1.1.84)
101/01031	. . 3-Hydroxyisobutyrate dehydrogenase (1.1.1.31)	101/01085	. . 3-Isopropylmalate dehydrogenase (1.1.1.85)
101/01032	. . Mevaldate reductase (1.1.1.32)	101/01086	. . Ketol-acid reductoisomerase (1.1.1.86)
101/01033	. . Mevaldate reductase (NADPH) (1.1.1.33)	101/01087	. . Homoisocitrate dehydrogenase (1.1.1.87)
101/01034	. . Hydroxymethylglutaryl-CoA reductase (NADPH) (1.1.1.34)	101/01088	. . Hydroxymethylglutaryl-CoA reductase (1.1.1.88)
101/01035	. . 3-Hydroxyacyl-CoA dehydrogenase (1.1.1.35)	101/0109	. . Aryl-alcohol dehydrogenase (1.1.1.90)
101/01036	. . Acetoacetyl-CoA reductase (1.1.1.36)	101/01091	. . Aryl-alcohol dehydrogenase (NADP+) (1.1.1.91)
101/01037	. . Malate dehydrogenase (1.1.1.37)	101/01092	. . Oxaloglycolate reductase (decarboxylating) (1.1.1.92)
101/01038	. . Malate dehydrogenase (oxaloacetate-decarboxylating) (1.1.1.38)	101/01093	. . Tartrate dehydrogenase (1.1.1.93)
101/01039	. . Malate dehydrogenase (decarboxylating) (1.1.1.39)	101/01094	. . Glycerol-3-phosphate dehydrogenase (NAD(P)+) (1.1.1.94)
101/0104	. . Malate dehydrogenase (oxaloacetate-decarboxylating) (NADP+) (1.1.1.40)	101/01095	. . Phosphoglycerate dehydrogenase (1.1.1.95)
101/01041	. . Isocitrate dehydrogenase (NAD+) (1.1.1.41)	101/01096	. . Diiodophenylpyruvate reductase (1.1.1.96)
101/01042	. . Isocitrate dehydrogenase (NADP+) (1.1.1.42)	101/01097	. . 3-Hydroxybenzyl-alcohol dehydrogenase (1.1.1.97)
101/01043	. . Phosphogluconate 2-dehydrogenase (1.1.1.43)	101/01098	. . (R)-2-Hydroxy-fatty-acid dehydrogenase (1.1.1.98)
101/01044	. . Phosphogluconate dehydrogenase (decarboxylating) (1.1.1.44)	101/01099	. . (S)-2-Hydroxy-fatty-acid dehydrogenase (1.1.1.99)
101/01045	. . L-Gulonate 3-dehydrogenase (1.1.1.45)	101/011	. . 3-Oxoacyl-[acyl-carrier-protein] reductase (1.1.1.100)
101/01046	. . L-Arabinose 1-dehydrogenase (1.1.1.46)	101/01101	. . Acylglycerone-phosphate reductase (1.1.1.101)
101/01047	. . Glucose 1-dehydrogenase (1.1.1.47)	101/01102	. . 3-Dehydrosphinganine reductase (1.1.1.102)
101/01048	. . D-Galactose 1-dehydrogenase (1.1.1.48)	101/01103	. . L-Threonine 3-dehydrogenase (1.1.1.103)
101/01049	. . Glucose-6-phosphate dehydrogenase (1.1.1.49)	101/01104	. . 4-Oxoproline reductase (1.1.1.104)
101/0105	. . 3Alpha-hydroxysteroid 3-dehydrogenase (B-specific) (1.1.1.50)	101/01105	. . Retinol dehydrogenase (1.1.1.105)
101/01051	. . 3 (or 17)-Beta-hydroxysteroid dehydrogenase (1.1.1.51)	101/01106	. . Pantoate 4-dehydrogenase (1.1.1.106)
101/01052	. . 3-Alpha-hydroxycholesterol dehydrogenase (1.1.1.52)	101/01107	. . Pyridoxal 4-dehydrogenase (1.1.1.107)
101/01053	. . 3-Alpha (or 20-beta)-hydroxysteroid dehydrogenase (1.1.1.53)	101/01108	. . Carnitine 3-dehydrogenase (1.1.1.108)
101/01054	. . Allyl-alcohol dehydrogenase (1.1.1.54)	101/0111	. . Indolelactate dehydrogenase (1.1.1.110)
101/01055	. . Lactaldehyde reductase (NADPH) (1.1.1.55)	101/01111	. . 3-(Imidazol-5-yl)lactate dehydrogenase (1.1.1.111)
101/01056	. . Ribitol 2-dehydrogenase (1.1.1.56)	101/01112	. . Indanol dehydrogenase (1.1.1.112)
101/01057	. . Fructuronate reductase (1.1.1.57)	101/01113	. . L-Xylose 1-dehydrogenase (1.1.1.113)
101/01058	. . Tagaturonate reductase (1.1.1.58)	101/01114	. . Apiose 1-reductase (1.1.1.114)
		101/01115	. . Ribose 1-dehydrogenase (NADP+) (1.1.1.115)

101/01116	. . D-Arabinose 1-dehydrogenase (1.1.1.116)	101/0116	. . Dihydrobunolol dehydrogenase (1.1.1.160)
101/01117	. . D-Arabinose 1-dehydrogenase (NAD(P)+) (1.1.1.117)	101/01162	. . Erythrulose reductase (1.1.1.162)
101/01118	. . Glucose 1-dehydrogenase (NAD+) (1.1.1.118)	101/01163	. . Cyclopentanol dehydrogenase (1.1.1.163)
101/01119	. . Glucose 1-dehydrogenase (NADP+) (1.1.1.119)	101/01164	. . Hexadecanol dehydrogenase (1.1.1.164)
101/0112	. . Galactose 1-dehydrogenase (NADP+) (1.1.1.120)	101/01165	. . 2-Alkyn-1-ol dehydrogenase (1.1.1.165)
101/01121	. . Aldose 1-dehydrogenase (1.1.1.121)	101/01166	. . Hydroxycyclohexanecarboxylate dehydrogenase (1.1.1.166)
101/01122	. . D-Threo-aldose 1-dehydrogenase (1.1.1.122)	101/01167	. . Hydroxymalonate dehydrogenase (1.1.1.167)
101/01123	. . Sorbose 5-dehydrogenase (NADP+) (1.1.1.123)	101/01168	. . 2-Dehydropantolactone reductase (A-specific) (1.1.1.168)
101/01124	. . Fructose 5-dehydrogenase (NADP+) (1.1.1.124)	101/01169	. . 2-Dehydropantoate 2-reductase (1.1.1.169), i.e. ketopantoate-reductase
101/01125	. . 2-Deoxy-D-gluconate 3-dehydrogenase (1.1.1.125)	101/0117	. . 3Beta-hydroxy-4alpha-carboxy-sterol 3- dehydrogenase (decarboxylating) (1.1.1.170)
101/01126	. . 2-Dehydro-3-deoxy-D-gluconate 6- dehydrogenase (1.1.1.126)	101/01172	. . 2-Oxadipate reductase (1.1.1.172)
101/01127	. . 2-Dehydro-3-deoxy-D-gluconate 5- dehydrogenase (1.1.1.127)	101/01173	. . L-Rhamnose 1-dehydrogenase (1.1.1.173)
101/01129	. . L-Threonate 3-dehydrogenase (1.1.1.129)	101/01174	. . Cyclohexane-1,2-diol dehydrogenase (1.1.1.174)
101/0113	. . 3-Dehydro-L-gulonate 2-dehydrogenase (1.1.1.130)	101/01175	. . D-Xylose 1-dehydrogenase (1.1.1.175)
101/01131	. . Mannuronate reductase (1.1.1.131)	101/01176	. . 12-Alpha-hydroxysteroid dehydrogenase (1.1.1.176)
101/01132	. . GDP-mannose 6-dehydrogenase (1.1.1.132)	101/01177	. . Glycerol-3-phosphate 1-dehydrogenase (NADP+) (1.1.1.177)
101/01133	. . dTDP-4-dehydrorhamnose reductase (1.1.1.133)	101/01178	. . 3-Hydroxy-2-methylbutyryl-CoA dehydrogenase (1.1.1.178)
101/01134	. . dTDP-6-deoxy-L-talose 4-dehydrogenase (1.1.1.134)	101/01179	. . D-Xylose 1-dehydrogenase (NADP+) (1.1.1.179)
101/01135	. . GDP-6-deoxy-D-talose 4-dehydrogenase (1.1.1.135)	101/01181	. . Cholest-5-ene-3-beta,7-alpha-diol 3-beta- dehydrogenase (1.1.1.181)
101/01136	. . UDP-N-acetylglucosamine 6-dehydrogenase (1.1.1.136)	101/01182	. . Fenchol dehydrogenase (1.1.1.182) <a href="#">(C12Y 101/01198, C12Y 101/01227,</a> <a href="#">C12Y 101/01228 take precedence)</a>
101/01137	. . Ribitol-5-phosphate 2-dehydrogenase (1.1.1.137)	101/01183	. . Geraniol dehydrogenase (1.1.1.183)
101/01138	. . Mannitol 2-dehydrogenase (NADP+) (1.1.1.138)	101/01184	. . Carbonyl reductase (NADPH) (1.1.1.184)
101/0114	. . Sorbitol-6-phosphate 2-dehydrogenase (1.1.1.140)	101/01185	. . L-Glycol dehydrogenase (1.1.1.185)
101/01141	. . 15-Hydroxyprostaglandin dehydrogenase (NAD +) (1.1.1.141)	101/01186	. . dTDP-galactose 6-dehydrogenase (1.1.1.186)
101/01142	. . D-Pinitol dehydrogenase (1.1.1.142)	101/01187	. . GDP-4-dehydro-D-rhamnose reductase (1.1.1.187)
101/01143	. . Sequoyitol dehydrogenase (1.1.1.143)	101/01188	. . Prostaglandin-F synthase (1.1.1.188)
101/01144	. . Perillyl-alcohol dehydrogenase (1.1.1.144)	101/01189	. . Prostaglandin-E(2) 9-reductase (1.1.1.189)
101/01145	. . 3-Beta-hydroxy-DELTA5-steroid dehydrogenase (1.1.1.145)	101/0119	. . Indole-3-acetaldehyde reductase (NADH) (1.1.1.190)
101/01146	. . 11-Beta-hydroxysteroid dehydrogenase (1.1.1.146)	101/01191	. . Indole-3-acetaldehyde reductase (NADPH) (1.1.1.191)
101/01147	. . 16-Alpha-hydroxysteroid dehydrogenase (1.1.1.147)	101/01192	. . Long-chain-alcohol dehydrogenase (1.1.1.192)
101/01148	. . Estradiol 17alpha-dehydrogenase (1.1.1.148)	101/01193	. . 5-Amino-6-(5-phosphoribosylamino)uracil reductase (1.1.1.193)
101/01149	. . 20-Alpha-hydroxysteroid dehydrogenase (1.1.1.149)	101/01194	. . Coniferyl-alcohol dehydrogenase (1.1.1.194)
101/0115	. . 21-Hydroxysteroid dehydrogenase (NAD+) (1.1.1.150)	101/01195	. . Cinnamyl-alcohol dehydrogenase (1.1.1.195)
101/01151	. . 21-Hydroxysteroid dehydrogenase (NADP+) (1.1.1.151)	101/01196	. . 15-Hydroxyprostaglandin-D dehydrogenase (NADP+) (1.1.1.196)
101/01152	. . 3-Alpha-hydroxy-5-beta-androstane-17-one 3- alpha-dehydrogenase (1.1.1.152)	101/01197	. . 15-Hydroxyprostaglandin dehydrogenase (NADP +) (1.1.1.197)
101/01153	. . Sepiapterin reductase (L-erythro-7,8- dihydrobiopterin forming) (1.1.1.153)	101/01198	. . (+)-Borneol dehydrogenase (1.1.1.198)
101/01154	. . Ureidoglycolate dehydrogenase (1.1.1.154)	101/01199	. . (S)-Usnate reductase (1.1.1.199)
101/01156	. . Glycerol 2-dehydrogenase (NADP+) (1.1.1.156)	101/012	. . Aldose-6-phosphate reductase (NADPH) (1.1.1.200)
101/01157	. . 3-Hydroxybutyryl-CoA dehydrogenase (1.1.1.157)	101/01201	. . 7-Beta-hydroxysteroid dehydrogenase (NADP+) (1.1.1.201)
101/01158	. . UDP-N-acetylmuramate dehydrogenase (1.1.1.158), i.e. UDP-N- acetylenolpyruvoylglucosamine reductase	101/01202	. . 1,3-Propanediol dehydrogenase (1.1.1.202)
101/01159	. . 7-Alpha-hydroxysteroid dehydrogenase (1.1.1.159)	101/01203	. . Uronate dehydrogenase (1.1.1.203)
		101/01205	. . IMP dehydrogenase (1.1.1.205)
		101/01206	. . Tropinone reductase I (1.1.1.206)
		101/01207	. . (-)-Menthol dehydrogenase (1.1.1.207)
		101/01208	. . (+)-Neomenthol dehydrogenase (1.1.1.208)

101/01209	. . 3 (or 17)-Alpha-hydroxysteroid dehydrogenase (1.1.1.209)	101/01252	. . Tetrahydroxynaphthalene reductase (1.1.1.252)
101/0121	. . 3-Beta (or 20-alpha)-hydroxysteroid dehydrogenase (1.1.1.210)	101/01254	. . (S)-Carnitine 3-dehydrogenase (1.1.1.254)
101/01211	. . Long-chain-3-hydroxyacyl-CoA dehydrogenase (1.1.1.211)	101/01255	. . Mannitol dehydrogenase (1.1.1.255)
101/01212	. . 3-Oxoacyl-[acyl-carrier-protein] reductase (NADH) (1.1.1.212)	101/01256	. . Fluoren-9-ol dehydrogenase (1.1.1.256)
101/01213	. . 3Alpha-hydroxysteroid 3-dehydrogenase (A-specific) (1.1.1.213)	101/01257	. . 4-(Hydroxymethyl)benzenesulfonate dehydrogenase (1.1.1.257)
101/01214	. . 2-Dehydropantolactone reductase (B-specific) (1.1.1.214)	101/01258	. . 6-Hydroxyhexanoate dehydrogenase (1.1.1.258)
101/01215	. . Gluconate 2-dehydrogenase (1.1.1.215)	101/01259	. . 3-Hydroxypimeloyl-CoA dehydrogenase (1.1.1.259)
101/01216	. . Farnesol dehydrogenase (1.1.1.216)	101/0126	. . Sulcatone reductase (1.1.1.260)
101/01217	. . Benzyl-2-methyl-hydroxybutyrate dehydrogenase (1.1.1.217)	101/01261	. . sn-Glycerol-1-phosphate dehydrogenase (1.1.1.261)
101/01218	. . Morphine 6-dehydrogenase (1.1.1.218)	101/01262	. . 4-Hydroxythreonine-4-phosphate dehydrogenase (1.1.1.262)
101/01219	. . Dihydrokaempferol 4-reductase (1.1.1.219), i.e. dihydroflavonol-4-reductase	101/01263	. . 1,5-Anhydro-D-fructose reductase (1.1.1.263)
101/0122	. . 6-Pyruvoyltetrahydropterin 2'-reductase (1.1.1.220)	101/01264	. . L-Idonate 5-dehydrogenase (1.1.1.264), i.e. L-idonate 2-dehydrogenase
101/01221	. . Vomifoliol dehydrogenase (1.1.1.221)	101/01265	. . 3-Methylbutanal reductase (1.1.1.265)
101/01222	. . (R)-4-Hydroxyphenyllactate dehydrogenase (1.1.1.222)	101/01266	. . dTDP-4-dehydro-6-deoxyglucose reductase (1.1.1.266)
101/01223	. . Isopiperitenol dehydrogenase (1.1.1.223)	101/01267	. . 1-Deoxy-D-xylulose-5-phosphate reductoisomerase (1.1.1.267)
101/01224	. . Mannose-6-phosphate 6-reductase (1.1.1.224)	101/01268	. . 2-(R)-Hydroxypropyl-CoM dehydrogenase (1.1.1.268)
101/01225	. . Chlordecone reductase (1.1.1.225)	101/01269	. . 2-(S)-Hydroxypropyl-CoM dehydrogenase (1.1.1.269)
101/01226	. . 4-Hydroxycyclohexanecarboxylate dehydrogenase (1.1.1.226)	101/0127	. . 3Beta-hydroxysteroid 3-dehydrogenase (1.1.1.270)
101/01227	. . (-)-Borneol dehydrogenase (1.1.1.227)	101/01271	. . GDP-L-fucose synthase (1.1.1.271)
101/01228	. . (+)-Sabinol dehydrogenase (1.1.1.228)	101/01272	. . (R)-2-Hydroxyacid dehydrogenase (1.1.1.272)
101/01229	. . Diethyl 2-methyl-3-oxosuccinate reductase (1.1.1.229)	101/01273	. . Velloimine dehydrogenase (1.1.1.273)
101/0123	. . 3-Alpha-hydroxyglycylrrhinate dehydrogenase (1.1.1.230)	101/01274	. . 2,5-Didehydrogluconate reductase (1.1.1.274), i.e. 2,5-diketo-D-gluconic acid reductase
101/01231	. . 15-Hydroxyprostaglandin-I dehydrogenase (NADP+) (1.1.1.231)	101/01275	. . (+)-Trans-carveol dehydrogenase (1.1.1.275)
101/01232	. . 15-Hydroxyicosatetraenoate dehydrogenase (1.1.1.232)	101/01276	. . Serine 3-dehydrogenase (1.1.1.276)
101/01233	. . N-Acylmannosamine 1-dehydrogenase (1.1.1.233)	101/01277	. . 3-Beta-hydroxy-5-beta-steroid dehydrogenase (1.1.1.277)
101/01234	. . Flavanone 4-reductase (1.1.1.234)	101/01278	. . 3-Beta-hydroxy-5-alpha-steroid dehydrogenase (1.1.1.278)
101/01235	. . 8-Oxocoformycin reductase (1.1.1.235)	101/01279	. . (R)-3-Hydroxyacid-ester dehydrogenase (1.1.1.279)
101/01236	. . Tropinone reductase II (1.1.1.236)	101/0128	. . (S)-3-Hydroxyacid-ester dehydrogenase (1.1.1.280)
101/01237	. . Hydroxyphenylpyruvate reductase (1.1.1.237)	101/01281	. . GDP-4-dehydro-6-deoxy-D-mannose reductase (1.1.1.281)
101/01238	. . 12-Beta-hydroxysteroid dehydrogenase (1.1.1.238)	101/01282	. . Quinate/shikimate dehydrogenase (1.1.1.282)
101/01239	. . 3Alpha(17beta)-hydroxysteroid dehydrogenase (NAD+) (1.1.1.239), i.e. testosterone 17beta-dehydrogenase	101/01283	. . Methylglyoxal reductase (NADPH-dependent) (1.1.1.283)
101/0124	. . N-Acetylhexosamine 1-dehydrogenase (1.1.1.240)	101/01284	. . S-(hydroxymethyl)glutathione dehydrogenase (1.1.1.284), i.e. nitroreductase
101/01241	. . 6-Endo-hydroxycineole dehydrogenase (1.1.1.241)	101/01285	. . 3"-Deamino-3"-oxonicotianamine reductase (1.1.1.285)
101/01243	. . Carveol dehydrogenase (1.1.1.243)	101/01286	. . Isocitrate--homoisocitrate dehydrogenase (1.1.1.286)
101/01244	. . Methanol dehydrogenase (1.1.1.244)	101/01287	. . D-Arabinitol dehydrogenase (NADP+) (1.1.1.287)
101/01245	. . Cyclohexanol dehydrogenase (1.1.1.245)	101/01288	. . Xanthoxin dehydrogenase (1.1.1.288)
101/01246	. . Pterocarpin synthase (1.1.1.246)	101/01289	. . Sorbose reductase (1.1.1.289)
101/01247	. . Codeinone reductase (NADPH) (1.1.1.247)	101/0129	. . 4-Phosphoerythronate dehydrogenase (1.1.1.290)
101/01248	. . Salutaridine reductase (NADPH) (1.1.1.248)	101/01291	. . 2-Hydroxymethylglutarate dehydrogenase (1.1.1.291)
101/0125	. . D-Arabinitol 2-dehydrogenase (1.1.1.250)	101/01292	. . 1,5-Anhydro-D-fructose reductase (1,5-anhydro-D-mannitol-forming) (1.1.1.292)
101/01251	. . Galactitol-1-phosphate 5-dehydrogenase (1.1.1.251)		

- 101/01294 . . Chlorophyll(ide) b reductase (1.1.1.294)  
 101/01295 . . Momilactone-A synthase (1.1.1.295)  
 101/01296 . . Dihydrocarveol dehydrogenase (1.1.1.296)  
 101/01297 . . Limonene-1,2-diol dehydrogenase (1.1.1.297)  
 101/01298 . . 3-Hydroxypropionate dehydrogenase (NADP+)  
 (1.1.1.298)  
 101/01299 . . Malate dehydrogenase (NAD(P)+)(1.1.1.299)  
 101/013 . . NADP-retinol dehydrogenase (1.1.1.300)  
 101/01301 . . D-Arabitol-phosphate dehydrogenase (1.1.1.301)  
 101/01302 . . 2,5-Diamino-6-(ribosylamino)-4(3H)-  
 pyrimidinone 5'-phosphate reductase (1.1.1.302)  
 101/01303 . . Diacetyl reductase, [(R)-acetoin forming]  
 (1.1.1.303)  
 101/01304 . . Diacetyl reductase, (S)-acetoin forming  
 (1.1.1.304)  
 101/01305 . . UDP-glucuronic acid dehydrogenase (UDP-4-  
 keto-hexauronic acid decarboxylating)(1.1.1.305)  
 101/01306 . . S-(Hydroxymethyl)mycothiol dehydrogenase  
 (1.1.1.306)  
 101/01307 . . D-Xylose reductase (1.1.1.307)  
 101/01308 . . Sulfopropanediol 3-dehydrogenase (1.1.1.308)  
 101/01309 . . Phosphonoacetaldehyde reductase (NADH)  
 (1.1.1.309)  
 101/0131 . . (S)-Sulfolactate dehydrogenase (1.1.1.310)  
 101/01311 . . (S)-1-Phenylethanol dehydrogenase (1.1.1.311)  
 101/01312 . . 2-Hydroxy-4-carboxymuconate semialdehyde  
 hemiacetal dehydrogenase (1.1.1.312)  
 101/01313 . . Sulfoacetaldehyde reductase (1.1.1.313)  
 101/01314 . . Germacrene A alcohol dehydrogenase (1.1.1.314)  
 101/01315 . . 11-Cis-retinol dehydrogenase (1.1.1.315)  
 101/01316 . . L-Galactose 1-dehydrogenase (1.1.1.316)  
 101/01317 . . Perakine reductase (1.1.1.317)  
 101/01318 . . Eugenol synthase (1.1.1.318)  
 101/01319 . . Isoeugenol synthase (1.1.1.319)  
 101/0132 . . Benzil reductase [(S)-benzoin forming]  
 (1.1.1.320)  
 101/01321 . . Benzil reductase [(R)-benzoin forming]  
 (1.1.1.321)  
 101/01322 . . (-)-Endo-fenchol dehydrogenase (1.1.1.322)  
 101/01323 . . (+)-Thujan-3-ol dehydrogenase (1.1.1.323)  
 101/01324 . . 8-Hydroxygeraniol dehydrogenase (1.1.1.324)  
 101/01325 . . Sepiapterin reductase (L-threo-7,8-  
 dihydrobiopterin forming) (1.1.1.325)  
 101/01326 . . Zerumbone synthase (1.1.1.326)  
 101/01327 . . 5-Exo-hydroxycamphor dehydrogenase  
 (1.1.1.327)  
 101/01328 . . Nicotine blue oxidoreductase (1.1.1.328)  
 101/01329 . . 2-Deoxy-scylo-inosamine dehydrogenase  
 (1.1.1.329)  
 101/0133 . . Very-long-chain 3-oxoacyl-CoA reductase  
 (1.1.1.330)  
 101/01331 . . Secoisolariciresinol dehydrogenase (1.1.1.331)  
 101/01332 . . Chanoclavine-I dehydrogenase (1.1.1.332)  
 101/01333 . . Decaprenylphospho-beta-D-erythro-  
 pentofuranosid-2-ulose 2-reductase (1.1.1.333)  
 101/01334 . . Methylecgonone reductase (1.1.1.334)  
 101/01335 . . UDP-N-acetyl-2-amino-2-deoxyglucuronate  
 dehydrogenase (1.1.1.335)  
 101/01336 . . UDP-N-acetyl-D-mannosamine dehydrogenase  
 (1.1.1.336)  
 101/01337 . . L-2-Hydroxycarboxylate dehydrogenase (NAD+)  
 (1.1.1.337)  
 101/01338 . . (2R)-3-Sulfolactate dehydrogenase (NADP+)  
 (1.1.1.338)  
 101/01339 . . dTDP-6-deoxy-L-talose 4-dehydrogenase (NAD  
 +) (1.1.1.339)  
 101/0134 . . 1-Deoxy-11beta-hydroxypentalenate  
 dehydrogenase (1.1.1.340)  
 101/01341 . . CDP-abequose synthase (1.1.1.341)  
 101/01342 . . CDP-paratose synthase (1.1.1.342)  
 101/01817 . . Sulfoacetaldehyde reductase (1.1.1.B17)  
 101/02 . . with a cytochrome as acceptor (1.1.2)  
 101/02002 . . Mannitol dehydrogenase (cytochrome) (1.1.2.2)  
 101/02003 . . L-Lactate dehydrogenase (cytochrome) (1.1.2.3)  
 101/02004 . . D-lactate dehydrogenase (cytochrome) (1.1.2.4)  
 101/02005 . . D-Lactate dehydrogenase (cytochrome c-553)  
 (1.1.2.5)  
 101/02006 . . Polyvinyl alcohol dehydrogenase (cytochrome)  
 (1.1.2.6)  
 101/02007 . . Methanol dehydrogenase (cytochrome c)(1.1.2.7)  
 101/02008 . . Alcohol dehydrogenase (cytochrome c)(1.1.2.8)  
 101/03 . . with a oxygen as acceptor (1.1.3)  
 101/03003 . . Malate oxidase (1.1.3.3)  
 101/03004 . . Glucose oxidase (1.1.3.4)  
 101/03005 . . Hexose oxidase (1.1.3.5)  
 101/03006 . . Cholesterol oxidase (1.1.3.6)  
 101/03007 . . Aryl-alcohol oxidase (1.1.3.7)  
 101/03008 . . L-Gulonolactone oxidase (1.1.3.8)  
 101/03009 . . Galactose oxidase (1.1.3.9)  
 101/0301 . . Pyranose oxidase (1.1.3.10)  
 101/03011 . . L-sorbose oxidase (1.1.3.11)  
 101/03012 . . Pyridoxine 4-oxidase (1.1.3.12)  
 101/03013 . . Alcohol oxidase (1.1.3.13)  
 101/03014 . . Catechol oxidase (dimerizing) (1.1.3.14)  
 101/03015 . . (S)-2-Hydroxy-acid oxidase (1.1.3.15)  
 101/03016 . . Ecdysone oxidase (1.1.3.16)  
 101/03017 . . Choline oxidase (1.1.3.17)  
 101/03018 . . Secondary-alcohol oxidase (1.1.3.18)  
 101/03019 . . 4-Hydroxymandelate oxidase (1.1.3.19)  
 101/0302 . . Long-chain-alcohol oxidase (1.1.3.20)  
 101/03021 . . Glycerol-3-phosphate-oxidase (1.1.3.21)  
 101/03023 . . Thiamine oxidase (1.1.3.23)  
 101/03027 . . Hydroxyphytanate oxidase (1.1.3.27)  
 101/03028 . . Nucleoside oxidase (1.1.3.28)  
 101/03029 . . N-Acylhexosamine oxidase (1.1.3.29)  
 101/0303 . . Polyvinyl-alcohol oxidase (1.1.3.30)  
 101/03037 . . D-Arabinono-1,4-lactone oxidase (1.1.3.37)  
 101/03038 . . Vanillyl-alcohol oxidase (1.1.3.38)  
 101/03039 . . Nucleoside oxidase (H<sub>2</sub>O<sub>2</sub>-forming) (1.1.3.39)  
 101/0304 . . D-Mannitol oxidase (1.1.3.40)  
 101/03041 . . Alditol oxidase (1.1.3.41)  
 101/03042 . . Prosolanapyrone-II oxidase (1.1.3.42)  
 101/03043 . . Paromamine 6'-oxidase (1.1.3.43)  
 101/03044 . . 6"-Hydroxyneomycin C oxidase (1.1.3.44)  
 101/04 . . with a disulfide as acceptor (1.1.4)  
 101/04001 . . Vitamin-K-epoxide reductase (warfarin-sensitive)  
 (1.1.4.1)  
 101/04002 . . Vitamin-K-epoxide reductase (warfarin-  
 insensitive) (1.1.4.2)  
 101/05 . . with a quinone or similar compound as acceptor  
 (1.1.5)  
 101/05002 . . Quinoprotein glucose dehydrogenase (1.1.5.2)  
 101/05003 . . Glycerol-3-phosphate dehydrogenase (1.1.5.3)  
 101/05004 . . Malate dehydrogenase (quinone) (1.1.5.4)

101/05005	. . Alcohol dehydrogenase (quinone) (1.1.5.5)	102/01008	. . Betaine-aldehyde dehydrogenase (NADH) (1.2.1.8)
101/05006	. . Formate dehydrogenase-N (1.1.5.6)	102/01009	. . Glyceraldehyde-3-phosphate dehydrogenase (NADP+) (1.2.1.9)
101/05007	. . Cyclic alcohol dehydrogenase (quinone) (1.1.5.7)	102/0101	. . Acetaldehyde dehydrogenase (acetylating) (1.2.1.10)
101/05008	. . Quinate dehydrogenase (quinone) (1.1.5.8)	102/01011	. . Aspartate-semialdehyde dehydrogenase (1.2.1.11)
101/09	. with a copper protein as acceptor (1.1.9)	102/01012	. . Glyceraldehyde-3-phosphate dehydrogenase (phosphorylating) (1.2.1.12)
101/09001	. . Alcohol dehydrogenase (azurin) (1.1.9.1)	102/01013	. . Glyceraldehyde-3-phosphate dehydrogenase (NADP+) (phosphorylating) (1.2.1.13)
101/98	. with other, known, acceptors (1.1.98)	102/01015	. . Malonate-semialdehyde dehydrogenase (1.2.1.15)
101/98002	. . Glucose-6-phosphate dehydrogenase (coenzyme-F420) (1.1.98.2)	102/01016	. . Succinate-semialdehyde dehydrogenase [NAD(P)+] (1.2.1.16)
101/98003	. . Decaprenylphospho-beta-D-ribofuranose 2-oxidase (1.1.98.3)	102/01017	. . Glyoxylate dehydrogenase (acylating) (1.2.1.17)
101/99	. with other acceptors (1.1.99)	102/01018	. . Malonate-semialdehyde dehydrogenase (acetylating) (1.2.1.18)
101/99001	. . Choline dehydrogenase (1.1.99.1)	102/01019	. . Aminobutyraldehyde dehydrogenase (1.2.1.19)
101/99002	. . 2-Hydroxyglutarate dehydrogenase (1.1.99.2)	102/0102	. . Glutarate-semialdehyde dehydrogenase (1.2.1.20)
101/99003	. . Gluconate 2-dehydrogenase (acceptor) (1.1.99.3)	102/01021	. . Glycolaldehyde dehydrogenase (1.2.1.21)
101/99004	. . Dehydrogluconate dehydrogenase (1.1.99.4)	102/01022	. . Lactaldehyde dehydrogenase (1.2.1.22)
101/99006	. . D-2-Hydroxy-acid dehydrogenase (1.1.99.6)	102/01023	. . 2-Oxoaldehyde dehydrogenase (NAD+) (1.2.1.23)
101/99007	. . Lactate--malate transhydrogenase (1.1.99.7)	102/01024	. . Succinate-semialdehyde dehydrogenase (NAD+) (1.2.1.24)
101/99008	. . Alcohol dehydrogenase (acceptor) (1.1.99.8) ( <a href="#">C12Y 101/02007</a> , <a href="#">C12Y 101/02008</a> take precedence)	102/01025	. . 2-Oxoisovalerate dehydrogenase (acylating) (1.2.1.25)
101/99009	. . Pyridoxine 5-dehydrogenase (1.1.99.9)	102/01026	. . 2,5-Dioxovalerate dehydrogenase (1.2.1.26)
101/9901	. . Glucose dehydrogenase (acceptor) (1.1.99.10)	102/01027	. . Methylmalonate-semialdehyde dehydrogenase (acylating) (1.2.1.27)
101/99011	. . Fructose 5-dehydrogenase (1.1.99.11)	102/01028	. . Benzaldehyde dehydrogenase (NAD+) (1.2.1.28)
101/99012	. . Sorbose dehydrogenase (1.1.99.12)	102/01029	. . Aryl-aldehyde dehydrogenase (1.2.1.29)
101/99013	. . Glucoside 3-dehydrogenase (1.1.99.13)	102/0103	. . Aryl-aldehyde dehydrogenase (NADP+) (1.2.1.30)
101/99014	. . Glycolate dehydrogenase (1.1.99.14)	102/01031	. . L-Aminoadipate-semialdehyde dehydrogenase (1.2.1.31), i.e. alpha-aminoadipate reductase
101/99018	. . Cellobiose oxidase (1.1.99.18)	102/01032	. . Aminomuconate-semialdehyde dehydrogenase (1.2.1.32)
101/9902	. . Alkan-1-ol dehydrogenase (acceptor) (1.1.99.20)	102/01033	. . (R)-Dehydropantoate dehydrogenase (1.2.1.33)
101/99021	. . D-Sorbitol dehydrogenase (acceptor) (1.1.99.21)	102/01036	. . Retinal dehydrogenase (1.2.1.36)
101/99022	. . Glycerol dehydrogenase (acceptor) (1.1.99.22)	102/01038	. . N-Acetyl-gamma-glutamyl-phosphate reductase (1.2.1.38)
101/99024	. . Hydroxyacid-oxoacid transhydrogenase (1.1.99.24)	102/01039	. . Phenylacetaldehyde dehydrogenase (1.2.1.39)
101/99026	. . 3-Hydroxycyclohexanone dehydrogenase (1.1.99.26)	102/01041	. . Glutamate-5-semialdehyde dehydrogenase (1.2.1.41)
101/99027	. . (R)-Pantolactone dehydrogenase (flavin) (1.1.99.27)	102/01042	. . Hexadecanal dehydrogenase (acylating) (1.2.1.42), i.e. fatty acyl-CoA reductase
101/99028	. . Glucose-fructose oxidoreductase (1.1.99.28)	102/01043	. . Formate dehydrogenase (NADP+) (1.2.1.43)
101/99029	. . Pyranose dehydrogenase (acceptor) (1.1.99.29)	102/01044	. . Cinnamoyl-CoA reductase (1.2.1.44)
101/9903	. . 2-Oxo-acid reductase (1.1.99.30)	102/01046	. . Formaldehyde dehydrogenase (1.2.1.46)
101/99031	. . (S)-Mandelate dehydrogenase (1.1.99.31)	102/01047	. . 4-Trimethylammonibutyraldehyde dehydrogenase (1.2.1.47)
101/99032	. . L-Sorbose 1-dehydrogenase (1.1.99.32)	102/01048	. . Long-chain-aldehyde dehydrogenase (1.2.1.48)
101/99033	. . Formate dehydrogenase (acceptor) (1.1.99.33)	102/01049	. . 2-Oxoaldehyde dehydrogenase (NADP+) (1.2.1.49)
101/99035	. . Soluble quinoprotein glucose dehydrogenase (1.1.99.35)	102/0105	. . Long-chain-fatty-acyl-CoA reductase (1.2.1.50)
101/99036	. . NDMA-dependent alcohol dehydrogenase (1.1.99.36)	102/01051	. . Pyruvate dehydrogenase (NADP+) (1.2.1.51)
101/99037	. . NDMA-dependent methanol dehydrogenase (1.1.99.37)	102/01052	. . Oxoglutarate dehydrogenase (NADP+) (1.2.1.52)
101/99038	. . 2-Deoxy-scylo-inosamine dehydrogenase (SAM-dependent) (1.1.99.38)	102/01053	. . 4-Hydroxyphenylacetaldehyde dehydrogenase (1.2.1.53)
<b>102/00</b>	<b>Oxidoreductases acting on the aldehyde or oxo group of donors (1.2)</b>	102/01054	. . Gamma-guanidinobutyraldehyde dehydrogenase (1.2.1.54)
102/01	. with NAD+ or NADP+ as acceptor (1.2.1)	102/01057	. . Butanal dehydrogenase (1.2.1.57)
102/01001	. . Formaldehyde dehydrogenase (glutathione) (1.2.1.1) ( <a href="#">C12Y 101/01284</a> , <a href="#">C12Y 404/01022</a> take precedence)		
102/01002	. . Formate dehydrogenase (1.2.1.2)		
102/01003	. . Aldehyde dehydrogenase (NAD+) (1.2.1.3)		
102/01004	. . Aldehyde dehydrogenase (NADP+) (1.2.1.4)		
102/01005	. . Aldehyde dehydrogenase [NAD(P)+] (1.2.1.5)		
102/01007	. . Benzaldehyde dehydrogenase (NADP+) (1.2.1.7)		



102/01058	. . Phenylglyoxylate dehydrogenase (acylating) (1.2.1.58)	102/04001	. . Pyruvate dehydrogenase (acetyl-transferring) (1.2.4.1)
102/01059	. . Glyceraldehyde-3-phosphate dehydrogenase (NAD(P)+)(phosphorylating) (1.2.1.59)	102/04002	. . Oxoglutarate dehydrogenase (succinyl-transferring) (1.2.4.2), i.e. alpha-ketoglutarat dehydrogenase
102/0106	. . 5-Carboxymethyl-2-hydroxymuconic-semialdehyde dehydrogenase (1.2.1.60)	102/04004	. . 3-Methyl-2-oxobutanoate dehydrogenase (2-methylpropanoyl-transferring) (1.2.4.4), i.e. branched-chain-alpha-ketoacid dehydrogenase
102/01061	. . 4-Hydroxymuconic-semialdehyde dehydrogenase (1.2.1.61)	102/05	. with a quinone or similar compound as acceptor (1.2.5)
102/01062	. . 4-Formylbenzenesulfonate dehydrogenase (1.2.1.62)	102/05001	. . Pyruvate dehydrogenase (quinone) (1.2.5.1)
102/01063	. . 6-Oxohexanoate dehydrogenase (1.2.1.63)	102/07	. with an iron-sulfur protein as acceptor (1.2.7)
102/01064	. . 4-Hydroxybenzaldehyde dehydrogenase (1.2.1.64)	102/07001	. . Pyruvate synthase (1.2.7.1), i.e. pyruvate ferredoxin oxidoreductase
102/01065	. . Salicylaldehyde dehydrogenase (1.2.1.65)	102/07002	. . 2-Oxobutyrate synthase (1.2.7.2)
102/01067	. . Vanillin dehydrogenase (1.2.1.67)	102/07003	. . 2-Oxoglutarate synthase (1.2.7.3)
102/01068	. . Coniferyl-aldehyde dehydrogenase (1.2.1.68)	102/07004	. . Carbon-monoxide dehydrogenase (ferredoxin) (1.2.7.4)
102/01069	. . Fluoroacetaldehyde dehydrogenase (1.2.1.69)	102/07005	. . Aldehyde ferredoxin oxidoreductase (1.2.7.5)
102/0107	. . Glutamyl-tRNA reductase (1.2.1.70)	102/07006	. . Glyceraldehyde-3-phosphate dehydrogenase (ferredoxin) (1.2.7.6)
102/01071	. . Succinylglutamate-semialdehyde dehydrogenase (1.2.1.71)	102/07007	. . 3-Methyl-2-oxobutanoate dehydrogenase (ferredoxin) (1.2.7.7)
102/01072	. . Erythrose-4-phosphate dehydrogenase (1.2.1.72)	102/07008	. . Indolepyruvate ferredoxin oxidoreductase (1.2.7.8)
102/01073	. . Sulfoacetaldehyde dehydrogenase (1.2.1.73)	102/0701	. . Oxalate oxidoreductase (1.2.7.10)
102/01074	. . Abieta-7,13-dien-18-al dehydrogenase (1.2.1.74)	102/99	. with other acceptors (1.2.99)
102/01075	. . Malonyl CoA reductase (malonate semialdehyde-forming)(1.2.1.75)	102/99002	. . Carbon-monoxide dehydrogenase (acceptor) (1.2.99.2)
102/01076	. . Succinate-semialdehyde dehydrogenase (acetylating) (1.2.1.76)	102/99003	. . Aldehyde dehydrogenase (pyrroloquinoline-quinone) (1.2.99.3)
102/01077	. . 3,4-Dehydrodipyl-CoA semialdehyde dehydrogenase (NADP+) (1.2.1.77)	102/99004	. . Formaldehyde dismutase (1.2.99.4)
102/01078	. . 2-Formylbenzoate dehydrogenase (1.2.1.78)	102/99005	. . Formylmethanofuran dehydrogenase (1.2.99.5)
102/01079	. . Succinate-semialdehyde dehydrogenase (NADP+) (1.2.1.79)	102/99006	. . Carboxylate reductase (1.2.99.6)
102/0108	. . Long-chain acyl-[acyl-carrier-protein] reductase (1.2.1.80)	102/99007	. . Aldehyde dehydrogenase (FAD-independent) (1.2.99.7)
102/01081	. . Sulfoacetaldehyde dehydrogenase (acylating) (1.2.1.81)	<b>103/00</b>	<b>Oxidoreductases acting on the CH-CH group of donors (1.3)</b>
102/01082	. . Beta-apo-4'-carotenal oxygenase (1.2.1.82)	103/01	. with NAD+ or NADP+ as acceptor (1.3.1)
102/01083	. . 3-Succinoylsemialdehyde-pyridine dehydrogenase (1.2.1.83)	103/01001	. . Dihydropyrimidine dehydrogenase (NAD+) (1.3.1.1)
102/01084	. . Alcohol-forming fatty acyl-CoA reductase (1.2.1.84)	103/01002	. . Dihydropyrimidine dehydrogenase (NADP+) (1.3.1.2)
102/01085	. . 2-Hydroxymuconate-6-semialdehyde dehydrogenase (1.2.1.85)	103/01003	. . DELTA4-3-oxosteroid 5-beta-reductase (1.3.1.3)
102/01086	. . Geranial dehydrogenase (1.2.1.86)	103/01005	. . Cucurbitacin DELTA23-reductase (1.3.1.5)
102/02	. with a cytochrome as acceptor (1.2.2)	103/01006	. . Fumarate reductase (NADH) (1.3.1.6)
102/02001	. . Formate dehydrogenase (cytochrome) (1.2.2.1)	103/01007	. . Meso-tartrate dehydrogenase (1.3.1.7)
102/02003	. . Formate dehydrogenase (cytochrome c-553) (1.2.2.3)	103/01008	. . Acyl-CoA dehydrogenase (NADP+) (1.3.1.8)
102/02004	. . Carbon-monoxide dehydrogenase (cytochrome b-561)(1.2.2.4)	103/01009	. . Enoyl-[acyl-carrier-protein] reductase (NADH) (1.3.1.9)
102/03	. with oxygen as acceptor (1.2.3)	103/0101	. . Enoyl-[acyl-carrier-protein] reductase (NADPH, B-specific)(1.3.1.10)
102/03001	. . Aldehyde oxidase (1.2.3.1), i.e. retinal oxidase	103/01011	. . 2-Coumarate reductase (1.3.1.11)
102/03003	. . Pyruvate oxidase (1.2.3.3)	103/01012	. . Prephenate dehydrogenase (1.3.1.12)
102/03004	. . Oxalate oxidase (1.2.3.4)	103/01013	. . Prephenate dehydrogenase (NADP+) (1.3.1.13)
102/03005	. . Glyoxylate oxidase (1.2.3.5)	103/01014	. . Dihydroorotate dehydrogenase (NAD+) (1.3.1.14)
102/03006	. . Pyruvate oxidase (CoA-acetylating) (1.2.3.6)	103/01015	. . Dihydroorotate dehydrogenase (NADP+) (1.3.1.15)
102/03007	. . Indole-3-acetaldehyde oxidase (1.2.3.7)	103/01016	. . Beta-nitroacrylate reductase (1.3.1.16)
102/03008	. . Pyridoxal oxidase (1.2.3.8)	103/01017	. . 3-Methyleneoxindole reductase (1.3.1.17)
102/03009	. . Aryl-aldehyde oxidase (1.2.3.9)	103/01018	. . Kynurenate-7,8-dihydrodiol dehydrogenase (1.3.1.18)
102/03013	. . 4-Hydroxyphenylpyruvate oxidase (1.2.3.13)		
102/03014	. . Absciscic-aldehyde oxidase (1.2.3.14)		
102/04	. with a disulfide as acceptor (1.2.4)		

103/01019	. . Cis-1,2-dihydrobenzene-1,2-diol dehydrogenase (1.3.1.19)	103/01069	. . Zeatin reductase (1.3.1.69)
103/0102	. . Trans-1,2-dihydrobenzene-1,2-diol dehydrogenase (1.3.1.20)	103/0107	. . DELTA14-sterol reductase (1.3.1.70)
103/01021	. . 7-Dehydrocholesterol reductase (1.3.1.21)	103/01071	. . DELTA24 (24(1))-sterol reductase (1.3.1.71)
103/01022	. . 3-Oxo-5alpha-steroid 4-dehydrogenase (NADP+) (1.3.1.22), i.e. cortisone alpha-reductase	103/01072	. . DELTA24-sterol reductase (1.3.1.72)
103/01024	. . Biliverdin reductase (1.3.1.24)	103/01073	. . 1,2-Dihydrovomilenine reductase (1.3.1.73)
103/01025	. . 1,6-Dihydroxycyclohexa-2,4-diene-1-carboxylate dehydrogenase (1.3.1.25)	103/01074	. . 2-Alkenal reductase (1.3.1.74)
103/01026	. . Dihydrodipicolinate reductase (1.3.1.26)	103/01075	. . Divinyl chlorophyllide a 8-vinyl-reductase (1.3.1.75)
103/01027	. . 2-Hexadecenal reductase (1.3.1.27)	103/01076	. . Precorrin-2 dehydrogenase (1.3.1.76)
103/01028	. . 2,3-Dihydro-2,3-dihydroxybenzoate dehydrogenase (1.3.1.28)	103/01077	. . Anthocyanidin reductase (1.3.1.77)
103/01029	. . Cis-1,2-dihydro-1,2-dihydroxynaphthalene dehydrogenase (1.3.1.29)	103/01078	. . Arogenate dehydrogenase (NADP+) (1.3.1.78)
103/01031	. . 2-Enoate reductase (1.3.1.31)	103/01079	. . Arogenate dehydrogenase (NAD(P)+)(1.3.1.79)
103/01032	. . Maleylacetate reductase (1.3.1.32)	103/0108	. . Red chlorophyll catabolite reductase (1.3.1.80)
103/01033	. . Protochlorophyllide reductase (1.3.1.33)	103/01081	. . (+)-Pulegone reductase (1.3.1.81)
103/01034	. . 2,4-dienoyl-CoA reductase (NADPH) (1.3.1.34)	103/01082	. . (-)-Isopiperitenone reductase (1.3.1.82)
103/01035	. . Phosphatidylcholine desaturase (1.3.1.35)	103/01083	. . Geranylgeranyl diphosphate reductase (1.3.1.83)
103/01036	. . Geissoschizine dehydrogenase (1.3.1.36)	103/01084	. . Acrylyl-CoA reductase (NADPH) (1.3.1.84)
103/01037	. . Cis-2-enoyl-CoA reductase (NADPH) (1.3.1.37)	103/01085	. . Crotonyl-CoA carboxylase/reductase (1.3.1.85)
103/01038	. . Trans-2-enoyl-CoA reductase (NADPH) (1.3.1.38)	103/01086	. . Crotonyl-CoA reductase (1.3.1.86)
103/01039	. . Enoyl-[acyl-carrier-protein] reductase (NADPH, A-specific)(1.3.1.39)	103/01087	. . 3-(Cis-5,6-dihydroxycyclohexa-1,3-dien-1-yl)propanoate dehydrogenase (1.3.1.87)
103/0104	. . 2-Hydroxy-6-oxo-6-phenylhexa-2,4-dienoate reductase (1.3.1.40)	103/01088	. . tRNA-dihydrouridine16/17 synthase (NAD(P)+) (1.3.1.88)
103/01041	. . Xanthommatin reductase (1.3.1.41)	103/01089	. . tRNA-dihydrouridine47 synthase (NAD(P)+) (1.3.1.89)
103/01042	. . 12-Oxophytodienoate reductase (1.3.1.42), i.e. morphinone-reductase	103/0109	. . tRNA-dihydrouridine20a/20b synthase (NAD(P)+)(1.3.1.90)
103/01043	. . Arogenate dehydrogenase (1.3.1.43)	103/01091	. . tRNA-dihydrouridine20 synthase (NAD(P)+) (1.3.1.91)
103/01044	. . Trans-2-enoyl-CoA reductase (NAD+) (1.3.1.44)	103/01092	. . Artemisinic aldehyde DELTA11(13)-reductase (1.3.1.92)
103/01045	. . 2'-Hydroxyisoflavone reductase (1.3.1.45)	103/01093	. . Very-long-chain enoyl-CoA reductase (1.3.1.93)
103/01046	. . Biochanin-A reductase (1.3.1.46)	103/01094	. . Polyprenol reductase (1.3.1.94)
103/01047	. . Alpha-santonin 1,2-reductase (1.3.1.47)	103/01095	. . Acrylyl-CoA reductase (NADH) (1.3.1.95)
103/01048	. . 15-Oxoprostaglandin 13-oxidase (1.3.1.48)	103/01096	. . Botryococcus squalene synthase (1.3.1.96)
103/01049	. . Cis-3,4-dihydrophenanthrene-3,4-diol dehydrogenase (1.3.1.49)	103/01097	. . Botryococcene synthase (1.3.1.97)
103/01051	. . 2'-Hydroxydaidzein reductase (1.3.1.51)	103/02	. . with a cytochrome as acceptor (1.3.2)
103/01053	. . (3S,4R)-3,4-dihydroxycyclohexa-1,5-diene-1,4-dicarboxylate dehydrogenase (1.3.1.53)	103/02003	. . L-Galactonolactone dehydrogenase (1.3.2.3)
103/01054	. . Precorrin-6A reductase (1.3.1.54)	103/03	. . with oxygen as acceptor (1.3.3)
103/01056	. . Cis-2,3-dihydrobiphenyl-2,3-diol dehydrogenase (1.3.1.56)	103/03003	. . Coproporphyrinogen oxidase (1.3.3.3)
103/01057	. . Phloroglucinol reductase (1.3.1.57)	103/03004	. . Protoporphyrinogen oxidase (1.3.3.4)
103/01058	. . 2,3-Dihydroxy-2,3-dihydro-p-cumate dehydrogenase (1.3.1.58)	103/03005	. . Bilirubin oxidase (1.3.3.5)
103/0106	. . Dibenzothiophene dihydrodiol dehydrogenase (1.3.1.60)	103/03006	. . Acyl-CoA oxidase (1.3.3.6)
103/01062	. . Pimeloyl-CoA dehydrogenase (1.3.1.62)	103/03007	. . Dihydrouracil oxidase (1.3.3.7)
103/01063	. . 2,4-Dichlorobenzoyl-CoA reductase (1.3.1.63)	103/03008	. . Tetrahydroberberine oxidase (1.3.3.8)
103/01064	. . Phthalate 4,5-cis-dihydrodiol dehydrogenase (1.3.1.64)	103/03009	. . Secologanin synthase (1.3.3.9)
103/01065	. . 5,6-Dihydroxy-3-methyl-2-oxo-1,2,5,6-tetrahydroquinoline dehydrogenase (1.3.1.65)	103/0301	. . Tryptophan alpha,beta-oxidase (1.3.3.10)
103/01066	. . Cis-dihydroethylcatechol dehydrogenase (1.3.1.66)	103/03011	. . Pyrroloquinoline-quinone synthase (1.3.3.11)
103/01067	. . Cis-1,2-dihydroxy-4-methylcyclohexa-3,5-diene-1-carboxylate dehydrogenase (1.3.1.67)	103/03012	. . L-Galactonolactone oxidase (1.3.3.12)
103/01068	. . 1,2-Dihydroxy-6-methylcyclohexa-3,5-dienecarboxylate dehydrogenase (1.3.1.68)	103/05	. . with a quinone or related compound as acceptor (1.3.5)
		103/05001	. . Succinate dehydrogenase (ubiquinone) (1.3.5.1)
		103/05002	. . Dihydroorotate dehydrogenase (1.3.5.2)
		103/05003	. . Protoporphyrinogen IX dehydrogenase (menaquinone) (1.3.5.3)
		103/05004	. . Fumarate reductase (menaquinone) (1.3.5.4)
		103/05005	. . 15-Cis-phytoene desaturase (1.3.5.5)
		103/05006	. . 9,9'-Di-cis-zeta-carotene desaturase (1.3.5.6)
		103/07	. . with an iron-sulfur protein as acceptor (1.3.7)
		103/07001	. . 6-Hydroxynicotinate reductase (1.3.7.1)
		103/07002	. . 15,16-Dihydrobiliverdin:ferredoxin oxidoreductase (1.3.7.2)



- 103/07003 . . Phycoerythrobilin:ferredoxin oxidoreductase (1.3.7.3)
- 103/07004 . . Phytochromobilin:ferredoxin oxidoreductase (1.3.7.4)
- 103/07005 . . Phycocyanobilin:ferredoxin oxidoreductase (1.3.7.5)
- 103/07006 . . Phycoerythrobilin synthase (1.3.7.6)
- 103/07007 . . Ferredoxin:protochlorophyllide reductase (ATP-dependent) (1.3.7.7)
- 103/07008 . . Benzoyl-CoA reductase (1.3.7.8)
- 103/07009 . . 4-Hydroxybenzoyl-CoA reductase (1.3.7.9)
- 103/0701 . . Pentalenolactone synthase (1.3.7.10)
- 103/08 . . with flavin as acceptor (1.3.8)
- 103/08001 . . Butyryl-CoA dehydrogenase (1.3.8.1), i.e. short chain acyl-CoA dehydrogenase
- 103/08002 . . 4,4'-Diapophytoene desaturase (1.3.8.2)
- 103/08003 . . (R)-Benzylsuccinyl-CoA dehydrogenase (1.3.8.3)
- 103/08004 . . Isovaleryl-CoA dehydrogenase (1.3.8.4)
- 103/08005 . . 2-Methyl-branched-chain-enoyl-CoA reductase (1.3.8.5)
- 103/08006 . . Glutaryl-CoA dehydrogenase (1.3.8.6)
- 103/08007 . . Medium-chain acyl-CoA dehydrogenase (1.3.8.7)
- 103/08008 . . Long-chain acyl-CoA dehydrogenase (1.3.8.8)
- 103/08009 . . Very-long-chain acyl-CoA dehydrogenase (1.3.8.9)
- 103/98 . . with other, known, acceptors (1.3.98)
- 103/98001 . . Dihydroorotate oxidase (fumarate) (1.3.98.1)
- 103/99 . . with other acceptors (1.3.99)
- 103/99001 . . Succinate dehydrogenase (1.3.99.1)
- 103/99002 . . Butyryl-CoA dehydrogenase (1.3.99.2), i.e. short chain acyl-CoA dehydrogenase
- 103/99003 . . Acyl-CoA dehydrogenase (1.3.99.3)  
([C12Y 103/08007](#), [C12Y 103/08008](#) and [C12Y 103/08009](#) take precedence)
- 103/99004 . . 3-Oxosteroid 1-dehydrogenase (1.3.99.4)
- 103/99005 . . 3-Oxo-5 $\alpha$ -steroid 4-dehydrogenase (acceptor) (1.3.99.5), i.e. steroid-5 $\alpha$ -reductase
- 103/99006 . . 3-Oxo-5 $\beta$ -steroid 4-dehydrogenase (1.3.99.6)
- 103/99008 . . 2-Furoyl-CoA dehydrogenase (1.3.99.8)
- 103/99012 . . 2-Methylacyl-CoA dehydrogenase (1.3.99.12)
- 103/99014 . . Cyclohexanone dehydrogenase (1.3.99.14)
- 103/99016 . . Isoquinoline 1-oxidoreductase (1.3.99.16)
- 103/99017 . . Quinoline 2-oxidoreductase (1.3.99.17)
- 103/99018 . . Quinaldate 4-oxidoreductase (1.3.99.18)
- 103/99019 . . Quinoline-4-carboxylate 2-oxidoreductase (1.3.99.19)
- 103/99022 . . Coproporphyrinogen dehydrogenase (1.3.99.22)
- 103/99023 . . All-trans-retinol 13,14-reductase (1.3.99.23)
- 103/99024 . . 2-Amino-4-deoxychorismate dehydrogenase (1.3.99.24)
- 103/99025 . . Carvone reductase (1.3.99.25)
- 103/99026 . . All-trans-zeta-carotene desaturase (1.3.99.26)
- 103/99027 . . 1-Hydroxycarotenoid 3,4-desaturase (1.3.99.27)
- 103/99028 . . Phytoene desaturase (neurosporene-forming) (1.3.99.28)
- 103/99029 . . Phytoene desaturase (zeta-carotene-forming) (1.3.99.29)
- 103/9903 . . Phytoene desaturase (3,4-didehydrolycopene-forming) (1.3.99.30)
- 103/99031 . . Phytoene desaturase (lycopene-forming) (1.3.99.31)
- 103/99032 . . Glutaryl-CoA dehydrogenase (non-decarboxylating) (1.3.99.32)
- 104/00 Oxidoreductases acting on the CH-NH2 group of donors (1.4)**
- 104/01 . . with NAD<sup>+</sup> or NADP<sup>+</sup> as acceptor (1.4.1)
- 104/01001 . . Alanine dehydrogenase (1.4.1.1)
- 104/01002 . . Glutamate dehydrogenase (1.4.1.2)
- 104/01003 . . Glutamate dehydrogenase (NAD(P)<sup>+</sup>) (1.4.1.3)
- 104/01004 . . Glutamate dehydrogenase (NADP<sup>+</sup>) (1.4.1.4)
- 104/01005 . . L-Amino-acid dehydrogenase (1.4.1.5)
- 104/01007 . . Serine 2-dehydrogenase (1.4.1.7)
- 104/01008 . . Valine dehydrogenase (NADP<sup>+</sup>) (1.4.1.8)
- 104/01009 . . Leucine dehydrogenase (1.4.1.9)
- 104/0101 . . Glycine dehydrogenase (1.4.1.10)
- 104/01011 . . L-Erythro-3,5-diaminohexanoate dehydrogenase (1.4.1.11)
- 104/01012 . . 2,4-Diaminopentanoate dehydrogenase (1.4.1.12)
- 104/01013 . . Glutamate synthase (NADPH) (1.4.1.13)
- 104/01014 . . Glutamate synthase (NADH) (1.4.1.14)
- 104/01015 . . Lysine dehydrogenase (1.4.1.15)
- 104/01016 . . Diaminopimelate dehydrogenase (1.4.1.16)
- 104/01017 . . N-Methylalanine dehydrogenase (1.4.1.17)
- 104/01018 . . Lysine 6-dehydrogenase (1.4.1.18)
- 104/01019 . . Tryptophan dehydrogenase (1.4.1.19)
- 104/0102 . . Phenylalanine dehydrogenase (1.4.1.20)
- 104/01021 . . Aspartate dehydrogenase (1.4.1.21)
- 104/01023 . . Valine dehydrogenase (NAD<sup>+</sup>) (1.4.1.23)
- 104/01024 . . 3-Dehydroquininate synthase II (1.4.1.24)
- 104/02 . . with a cytochrome as acceptor (1.4.2)
- 104/02001 . . Glycine dehydrogenase (cytochrome) (1.4.2.1)
- 104/03 . . with oxygen as acceptor (1.4.3)
- 104/03001 . . D-Aspartate oxidase (1.4.3.1)
- 104/03002 . . L-Amino-acid oxidase (1.4.3.2)
- 104/03003 . . D-Amino-acid oxidase (1.4.3.3)
- 104/03004 . . Monoamine oxidase (1.4.3.4)
- 104/03005 . . Pyridoxal 5'-phosphate synthase (1.4.3.5), i.e. pyridoxamine 5-phosphate oxidase
- 104/03006 . . Amine oxidase (copper-containing) (1.4.3.6)  
([C12Y 104/03021](#), [C12Y 104/03022](#) take precedence)
- 104/03007 . . D-Glutamate oxidase (1.4.3.7)
- 104/03008 . . Ethanolamine oxidase (1.4.3.8)
- 104/0301 . . Putrescine oxidase (1.4.3.10)
- 104/03011 . . L-Glutamate oxidase (1.4.3.11)
- 104/03012 . . Cyclohexylamine oxidase (1.4.3.12)
- 104/03013 . . Protein-lysine 6-oxidase (1.4.3.13), i.e. lysyl-oxidase
- 104/03014 . . L-Lysine oxidase (1.4.3.14)
- 104/03015 . . D-Glutamate(D-aspartate) oxidase (1.4.3.15)
- 104/03016 . . L-Aspartate oxidase (1.4.3.16)
- 104/03019 . . Glycine oxidase (1.4.3.19)
- 104/0302 . . L-Lysine 6-oxidase (1.4.3.20)
- 104/03021 . . Primary-amine oxidase (1.4.3.21), i.e. VAP-1
- 104/03022 . . Diamine oxidase (1.4.3.22)
- 104/03023 . . 7-Chloro-L-tryptophan oxidase (1.4.3.23)
- 104/03024 . . Pseudooxynicotine oxidase (1.4.3.24)
- 104/04 . . with a disulfide as acceptor (1.4.4)
- 104/04002 . . Glycine dehydrogenase (decarboxylating) (1.4.4.2)
- 104/05 . . with a quinone or similar compound as acceptor (1.4.5)

- 104/05001 . . D-Amino acid dehydrogenase (quinone) (1.4.5.1)  
 104/07 . with an iron-sulfur protein as acceptor (1.4.7)  
 104/07001 . . Glutamate synthase (ferredoxin) (1.4.7.1)  
 104/09 . with a copper protein as acceptor (1.4.9)  
 104/09001 . . Methylamine dehydrogenase (amicyanin) (1.4.9.1)  
 104/09002 . . Aralkylamine dehydrogenase (azurin) (1.4.9.2)  
 104/98 . with other, known, acceptors (1.4.98)  
 104/99 . with other acceptors (1.4.99)  
 104/99001 . . D-Amino-acid dehydrogenase (1.4.99.1)  
 104/99002 . . Taurine dehydrogenase (1.4.99.2)  
 104/99003 . . Amine dehydrogenase (1.4.99.3)  
 104/99005 . . Glycine dehydrogenase (cyanide-forming) (1.4.99.5)
- 105/00 Oxidoreductases acting on the CH-NH group of donors (1.5)**
- 105/01 . with NAD<sup>+</sup> or NADP<sup>+</sup> as acceptor (1.5.1)  
 105/01001 . . Pyrroline-2-carboxylate reductase (1.5.1.1)  
 105/01002 . . Pyrroline-5-carboxylate reductase (1.5.1.2)  
 105/01003 . . Dihydrofolate reductase (1.5.1.3)  
 105/01005 . . Methylene-tetrahydrofolate dehydrogenase (NADP<sup>+</sup>) (1.5.1.5)  
 105/01006 . . Formyltetrahydrofolate dehydrogenase (1.5.1.6)  
 105/01007 . . Saccharopine dehydrogenase (NAD<sup>+</sup>, L-lysine-forming) (1.5.1.7)  
 105/01008 . . Saccharopine dehydrogenase (NADP<sup>+</sup>, L-lysine-forming) (1.5.1.8)  
 105/01009 . . Saccharopine dehydrogenase (NAD<sup>+</sup>, L-glutamate-forming) (1.5.1.9)  
 105/0101 . . Saccharopine dehydrogenase (NADP<sup>+</sup>, L-glutamate-forming) (1.5.1.10)  
 105/01011 . . D-Octopine dehydrogenase (1.5.1.11)  
 105/01012 . . 1-Pyrroline-5-carboxylate dehydrogenase (1.5.1.12)  
 105/01015 . . Methylene-tetrahydrofolate dehydrogenase (NAD<sup>+</sup>) (1.5.1.15)  
 105/01016 . . D-Lysopine dehydrogenase (1.5.1.16)  
 105/01017 . . Alanopine dehydrogenase (1.5.1.17)  
 105/01018 . . Ephedrine dehydrogenase (1.5.1.18)  
 105/01019 . . D-Nopaline dehydrogenase (1.5.1.19), i.e. D-nopaline synthase  
 105/0102 . . Methylene-tetrahydrofolate reductase [NAD(P)H] (1.5.1.20)  
 105/01021 . . DELTA1-piperidine-2-carboxylate reductase (1.5.1.21)  
 105/01022 . . Strombine dehydrogenase (1.5.1.22)  
 105/01023 . . Tauropine dehydrogenase (1.5.1.23)  
 105/01024 . . N5-(Carboxyethyl)ornithine synthase (1.5.1.24)  
 105/01025 . . Thiomorpholine-carboxylate dehydrogenase (1.5.1.25)  
 105/01026 . . Beta-alanopine dehydrogenase (1.5.1.26)  
 105/01027 . . 1,2-Dehydroreticulium reductase (NADPH) (1.5.1.27)  
 105/01028 . . Opine dehydrogenase (1.5.1.28)  
 105/01029 . . FMN reductase (1.5.1.29)  
 105/0103 . . Flavin reductase (1.5.1.30)  
 105/01031 . . Berberine reductase (1.5.1.31)  
 105/01032 . . Vomilenine reductase (1.5.1.32)  
 105/01033 . . Pteridine reductase (1.5.1.33)  
 105/01034 . . 6,7-Dihydropteridine reductase (1.5.1.34)  
 105/01036 . . Flavin reductase (NADH) (1.5.1.36)  
 105/01037 . . FAD reductase (NADH) (1.5.1.37)  
 105/01038 . . FMN reductase (NADPH) (1.5.1.38)  
 105/01039 . . FMN reductase (NAD(P)H) (1.5.1.39)  
 105/0104 . . 8-Hydroxy-5-deazaflavin:NADPH oxidoreductase (1.5.1.40)  
 105/01041 . . Riboflavin reductase (NAD(P)H) (1.5.1.41)  
 105/01042 . . FMN reductase (NADH) (1.5.1.42)  
 105/01043 . . Carboxynorspermidine synthase (1.5.1.43)  
 105/01044 . . Festuclavine dehydrogenase (1.5.1.44)  
 105/01045 . . FAD reductase [NAD(P)H] (1.5.1.45)  
 105/03 . with oxygen as acceptor (1.5.3)  
 105/03001 . . Sarcosine oxidase (1.5.3.1)  
 105/03002 . . N-Methyl-L-amino-acid oxidase (1.5.3.2)  
 105/03004 . . N6-Methyl-lysine oxidase (1.5.3.4)  
 105/03005 . . (S)-6-Hydroxynicotine oxidase (1.5.3.5)  
 105/03006 . . (R)-6-Hydroxynicotine oxidase (1.5.3.6)  
 105/03007 . . L-Pipecolate oxidase (1.5.3.7)  
 105/0301 . . Dimethylglycine oxidase (1.5.3.10)  
 105/03011 . . Polyamine oxidase (1.5.3.11)  
[\(C12Y 105/03013 - C12Y 105/03017 take precedence\)](#)  
 105/03012 . . Dihydrobenzophenanthridine oxidase (1.5.3.12)  
 105/03013 . . N1-Acetylpolyamine oxidase (1.5.3.13)  
 105/03014 . . Polyamine oxidase (propane-1,3-diamine-forming) (1.5.3.14)  
 105/03015 . . N8-Acetylspermidine oxidase (propane-1,3-diamine-forming) (1.5.3.15)  
 105/03016 . . Spermine oxidase (1.5.3.16)  
 105/03017 . . Non-specific polyamine oxidase (1.5.3.17)  
 105/03018 . . L-Saccharopine oxidase (1.5.3.18)  
 105/03019 . . 4-Methylaminobutanoate oxidase (formaldehyde-forming) (1.5.3.19)  
 105/0302 . . N-Alkylglycine oxidase (1.5.3.20)  
 105/03021 . . 4-Methylaminobutanoate oxidase (methylamine-forming) (1.5.3.21)  
 105/04 . with a disulfide as acceptor (1.5.4)  
 105/04001 . . Pyrimidodiazepine synthase (1.5.4.1)  
 105/05 . with a quinone or similar compound as acceptor (1.5.5)  
 105/05001 . . Electron-transferring-flavoprotein dehydrogenase (1.5.5.1)  
 105/07 . with an iron-sulfur protein as acceptor (1.5.7)  
 105/07001 . . Methylene-tetrahydrofolate reductase (ferredoxin) (1.5.7.1)  
 105/08 . with a flavin as acceptor (1.5.8)  
 105/08001 . . Dimethylamine dehydrogenase (1.5.8.1)  
 105/08002 . . Trimethylamine dehydrogenase (1.5.8.2)  
 105/08003 . . Sarcosine dehydrogenase (1.5.8.3)  
 105/08004 . . Dimethylglycine dehydrogenase (1.5.8.4)  
 105/99 . with other acceptors (1.5.99)  
 105/99003 . . L-Pipecolate dehydrogenase (1.5.99.3)  
 105/99004 . . Nicotine dehydrogenase (1.5.99.4)  
 105/99005 . . Methylglutamate dehydrogenase (1.5.99.5)  
 105/99006 . . Spermidine dehydrogenase (1.5.99.6)  
 105/99008 . . Proline dehydrogenase (1.5.99.8)  
 105/99009 . . Methylene-tetrahydromethanopterin dehydrogenase (1.5.99.9)  
 105/99011 . . 5,10-Methylene-tetrahydromethanopterin reductase (1.5.99.11)  
 105/99012 . . Cytokinin dehydrogenase (1.5.99.12)  
 105/99013 . . D-Proline dehydrogenase (1.5.99.13)  
 105/99014 . . 6-Hydroxypseudoxyxynicotine dehydrogenase (1.5.99.14)

**106/00 Oxidoreductases acting on NADH or NADPH (1.6)**

- 106/01 . with NAD<sup>+</sup> or NADP<sup>+</sup> as acceptor (1.6.1)
- 106/01001 . . NAD(P)<sup>+</sup> transhydrogenase (B-specific) (1.6.1.1)
- 106/01002 . . NAD(P)<sup>+</sup> Transhydrogenase (AB-specific) (1.6.1.2)
- 106/02 . with a heme protein as acceptor (1.6.2)
- 106/02002 . . Cytochrome-b5 reductase (1.6.2.2)
- 106/02004 . . NADPH-hemoprotein reductase (1.6.2.4), i.e. NADP-cytochrome P450-reductase
- 106/02005 . . NADPH--cytochrome-c2 reductase (1.6.2.5)
- 106/02006 . . Leghemoglobin reductase (1.6.2.6)
- 106/03 . with oxygen as acceptor (1.6.3)
- 106/03001 . . NAD(P)H oxidase (1.6.3.1), i.e. NOX1
- 106/05 . with a quinone or similar compound as acceptor (1.6.5)
- 106/05002 . . NAD(P)H dehydrogenase (quinone) (1.6.5.2)
- 106/05003 . . NADH dehydrogenase (ubiquinone) (1.6.5.3)
- 106/05004 . . Monodehydroascorbate reductase (NADH) (1.6.5.4)
- 106/05005 . . NADPH:quinone reductase (1.6.5.5)
- 106/05006 . . p-Benzoquinone reductase (NADPH) (1.6.5.6)
- 106/05007 . . 2-Hydroxy-1,4-benzoquinone reductase (1.6.5.7)
- 106/05008 . . NADH:ubiquinone reductase (Na<sup>+</sup>-transporting) (1.6.5.8)
- 106/05009 . . NADH:ubiquinone reductase (non-electrogenic) (1.6.5.9)
- 106/0501 . . NADPH dehydrogenase (quinone) (1.6.5.10)
- 106/06 . with a nitrogenous group as acceptor (1.6.6)
- 106/06009 . . Trimethylamine-N-oxide reductase (1.6.6.9)
- 106/99 . with other acceptors (1.6.99)
- 106/99001 . . NADPH dehydrogenase (1.6.99.1)
- 106/99003 . . NADH dehydrogenase (1.6.99.3)
- 106/99005 . . NADH dehydrogenase (quinone) (1.6.99.5)

**107/00 Oxidoreductases acting on other nitrogenous compounds as donors (1.7)**

- 107/01 . with NAD<sup>+</sup> or NADP<sup>+</sup> as acceptor (1.7.1)
- 107/01001 . . Nitrate reductase (NADH) (1.7.1.1)
- 107/01002 . . Nitrate reductase [NAD(P)H] (1.7.1.2)
- 107/01003 . . Nitrate reductase (NADPH) (1.7.1.3)
- 107/01004 . . Nitrite reductase [NAD(P)H] (1.7.1.4)
- 107/01005 . . Hyponitrite reductase (1.7.1.5)
- 107/01006 . . Azobenzene reductase (1.7.1.6)
- 107/01007 . . GMP reductase (1.7.1.7)
- 107/01009 . . Nitroquinoline-N-oxide reductase (1.7.1.9)
- 107/0101 . . Hydroxylamine reductase (NADH) (1.7.1.10)
- 107/01011 . . 4-(Dimethylamino)phenylazoxybenzene reductase (1.7.1.11)
- 107/01012 . . N-Hydroxy-2-acetamidofluorene reductase (1.7.1.12)
- 107/01013 . . PreQ1 synthase (1.7.1.13)
- 107/01014 . . Nitric oxide reductase (NAD(P), nitrous oxide-forming) (1.7.1.14)
- 107/02 . with a cytochrome as acceptor (1.7.2)
- 107/02001 . . Nitrite reductase (NO-forming) (1.7.2.1)
- 107/02002 . . Nitrite reductase (cytochrome; ammonia-forming) (1.7.2.2)
- 107/02003 . . Trimethylamine-N-oxide reductase (cytochrome c) (1.7.2.3)
- 107/02004 . . Nitrous-oxide reductase (1.7.2.4)
- 107/02005 . . Nitric-oxide reductase (cytochrome c) (1.7.2.5)
- 107/02006 . . Hydroxylamine dehydrogenase (1.7.2.6)
- 107/03 . with oxygen as acceptor (1.7.3)

- 107/03001 . . Nitroalkane oxidase (1.7.3.1)
- 107/03002 . . Acetylindoxyl oxidase (1.7.3.2)
- 107/03003 . . Factor-independent urate hydroxylase (1.7.3.3), i.e. uricase
- 107/03004 . . Hydroxylamine oxidase (1.7.3.4)
- 107/03005 . . 3-Aci-nitropropanoate oxidase (1.7.3.5)
- 107/05 . with a quinone or similar compound as acceptor (1.7.5)
- 107/05001 . . Nitrate reductase (quinone) (1.7.5.1)
- 107/05002 . . Nitric oxide reductase (menaquinol) (1.7.5.2)
- 107/06 . with a nitrogenous group as acceptor (1.7.6)
- 107/06001 . . Nitrite dismutase (1.7.6.1)
- 107/07 . with an iron-sulfur protein as acceptor (1.7.7)
- 107/07001 . . Ferredoxin--nitrite reductase (1.7.7.1)
- 107/07002 . . Ferredoxin--nitrate reductase (1.7.7.2)
- 107/99 . with other acceptors (1.7.99)
- 107/99001 . . Hydroxylamine reductase (1.7.99.1)
- 107/99004 . . Nitrate reductase (1.7.99.4)
- 107/99008 . . Hydrazine oxidoreductase (1.7.99.8)

**108/00 Oxidoreductases acting on sulfur groups as donors (1.8)**

- 108/01 . with NAD<sup>+</sup> or NADP<sup>+</sup> as acceptor (1.8.1)
- 108/01002 . . Sulfite reductase (NADPH) (1.8.1.2)
- 108/01003 . . Hypotaurine dehydrogenase (1.8.1.3)
- 108/01004 . . Dihydrolipoyl dehydrogenase (1.8.1.4), i.e. lipoamide-dehydrogenase
- 108/01005 . . 2-Oxopropyl-CoM reductase (carboxylating) (1.8.1.5)
- 108/01006 . . Cystine reductase (1.8.1.6)
- 108/01007 . . Glutathione-disulfide reductase (1.8.1.7), i.e. glutathione reductase (NADPH)
- 108/01008 . . Protein-disulfide reductase (1.8.1.8), i.e. thioredoxin
- 108/01009 . . Thioredoxin-disulfide reductase (1.8.1.9), i.e. thioredoxin-reductase
- 108/0101 . . CoA-glutathione reductase (NADPH) (1.8.1.10)
- 108/01011 . . Asparagusate reductase (1.8.1.11)
- 108/01012 . . Trypanothione reductase (1.8.1.12)
- 108/01013 . . Bis-gamma-glutamylcystine reductase (1.8.1.13)
- 108/01014 . . CoA-disulfide reductase (1.8.1.14)
- 108/01015 . . Mycothione reductase (1.8.1.15)
- 108/01016 . . Glutathione amide reductase (1.8.1.16)
- 108/01017 . . Dimethylsulfone reductase (1.8.1.17)
- 108/02 . with a cytochrome as acceptor (1.8.2)
- 108/02001 . . Sulfite dehydrogenase (1.8.2.1)
- 108/02002 . . Thiosulfate dehydrogenase (1.8.2.2)
- 108/02003 . . Sulfide-cytochrome-c reductase (flavocytochrome c) (1.8.2.3)
- 108/02004 . . Dimethyl sulfide:cytochrome c2 reductase (1.8.2.4)
- 108/03 . with oxygen as acceptor (1.8.3)
- 108/03001 . . Sulfite oxidase (1.8.3.1)
- 108/03002 . . Thiol oxidase (1.8.3.2)
- 108/03003 . . Glutathione oxidase (1.8.3.3)
- 108/03004 . . Methanethiol oxidase (1.8.3.4)
- 108/03005 . . Prenylcysteine oxidase (1.8.3.5)
- 108/03006 . . Farnesylcysteine lyase (1.8.3.6)
- 108/04 . with a disulfide as acceptor (1.8.4)
- 108/04001 . . Glutathione--homocystine transhydrogenase (1.8.4.1)
- 108/04002 . . Protein-disulfide reductase (glutathione) (1.8.4.2), i.e. BdbC or BdbD

- 108/04003 . . Glutathione--CoA-glutathione transhydrogenase (1.8.4.3)
- 108/04004 . . Glutathione--cystine transhydrogenase (1.8.4.4)
- 108/04005 . . Methionine-S-oxide reductase (1.8.4.5)  
([C12Y 108/04013](#), [C12Y 108/04014](#) take precedence)
- 108/04007 . . Enzyme-thiol transhydrogenase (glutathione-disulfide) (1.8.4.7)
- 108/04008 . . Phosphoadenylyl-sulfate reductase (thioredoxin) (1.8.4.8)
- 108/04009 . . Adenylyl-sulfate reductase (glutathione) (1.8.4.9)
- 108/0401 . . Adenylyl-sulfate reductase (thioredoxin) (1.8.4.10)
- 108/04011 . . Peptide-methionine (S)-S-oxide reductase (1.8.4.11)
- 108/04012 . . Peptide-methionine (R)-S-oxide reductase (1.8.4.12)
- 108/04013 . . L-Methionine (S)-S-oxide reductase (1.8.4.13)
- 108/04014 . . L-Methionine (R)-S-oxide reductase (1.8.4.14)
- 108/05 . . with a quinone or similar compound as acceptor (1.8.5)
- 108/05001 . . Glutathione dehydrogenase (ascorbate) (1.8.5.1)
- 108/05002 . . Thiosulfate dehydrogenase (quinone) (1.8.5.2)
- 108/05003 . . Dimethylsulfoxide reductase (1.8.5.3)
- 108/05004 . . Sulfide:quinone reductase (1.8.5.4)
- 108/07 . . with an iron-sulfur protein as acceptor (1.8.7)
- 108/07001 . . Sulfite reductase (ferredoxin) (1.8.7.1)
- 108/07002 . . Ferredoxin:thioredoxin reductase (1.8.7.2)
- 108/98 . . with other, known, acceptors (1.8.98)
- 108/98001 . . CoB--CoM heterodisulfide reductase (1.8.98.1)
- 108/98002 . . Sulfiredoxin (1.8.98.2)
- 108/99 . . with other acceptors (1.8.99)
- 108/99001 . . Sulfite reductase (1.8.99.1)
- 108/99002 . . Adenylyl-sulfate reductase (1.8.99.2)
- 108/99003 . . Hydrosulfite reductase (1.8.99.3)
- 109/00 Oxidoreductases acting on a heme group of donors (1.9)**
- 109/03 . . with oxygen as acceptor (1.9.3)
- 109/03001 . . Cytochrome-c oxidase (1.9.3.1)
- 109/06 . . with a nitrogenous group as acceptor (1.9.6)
- 109/06001 . . Nitrate reductase (cytochrome) (1.9.6.1)
- 109/99 . . with other acceptors (1.9.99)
- 109/99001 . . Iron--cytochrome-c reductase (1.9.99.1)
- 110/00 Oxidoreductases acting on diphenols and related substances as donors (1.10)**
- 110/01 . . with NAD<sup>+</sup> or NADP<sup>+</sup> as acceptor (1.10.1)
- 110/01001 . . Trans-acenaphthene-1,2-diol dehydrogenase (1.10.1.1)
- 110/02 . . with a cytochrome as acceptor (1.10.2)
- 110/02001 . . L-Ascorbate--cytochrome-b5 reductase (1.10.2.1)
- 110/02002 . . Ubiquinol-cytochrome-c reductase (1.10.2.2), i.e. electron-transport-complex-III
- 110/03 . . with an oxygen as acceptor (1.10.3)
- 110/03001 . . Catechol oxidase (1.10.3.1), i.e. tyrosinase
- 110/03002 . . Laccase (1.10.3.2)
- 110/03003 . . L-ascorbate oxidase (1.10.3.3)
- 110/03004 . . O-aminophenol oxidase (1.10.3.4)
- 110/03005 . . 3-Hydroxyanthranilate oxidase (1.10.3.5)
- 110/03006 . . Rifamycin-B oxidase (1.10.3.6)
- 110/03009 . . Photosystem II (1.10.3.9)
- 110/0301 . . Ubiquinol oxidase (H<sup>+</sup>-transporting) (1.10.3.10)
- 110/03011 . . Ubiquinol oxidase (1.10.3.11)
- 110/03012 . . Menaquinol oxidase (H<sup>+</sup>-transporting) (1.10.3.12)
- 110/09 . . with a copper protein as acceptor (1.10.9)
- 110/09001 . . Plastoquinol-plastocyanin reductase (1.10.9.1)
- 110/99 . . with other acceptors (1.10.99)
- 110/99002 . . Ribosyldihydronicotinamide dehydrogenase (quinone) (1.10.99.2)
- 110/99003 . . Violaxanthin de-epoxidase (1.10.99.3)
- 111/00 Oxidoreductases acting on a peroxide as acceptor (1.11)**
- 111/01 . . Peroxidases (1.11.1)
- 111/01001 . . NADH peroxidase (1.11.1.1)
- 111/01002 . . NADPH peroxidase (1.11.1.2)
- 111/01003 . . Fatty-acid peroxidase (1.11.1.3)
- 111/01005 . . Cytochrome-c peroxidase (1.11.1.5)
- 111/01006 . . Catalase (1.11.1.6)
- 111/01007 . . Peroxidase (1.11.1.7), i.e. horseradish-peroxidase
- 111/01008 . . Iodide peroxidase (1.11.1.8)
- 111/01009 . . Glutathione peroxidase (1.11.1.9)
- 111/0101 . . Chloride peroxidase (1.11.1.10)
- 111/01011 . . L-ascorbate peroxidase (1.11.1.11)
- 111/01012 . . Phospholipid-hydroperoxide glutathione peroxidase (1.11.1.12)
- 111/01013 . . Manganese peroxidase (1.11.1.13)
- 111/01014 . . Lignin peroxidase (1.11.1.14)
- 111/01015 . . Peroxiredoxin (1.11.1.15)
- 111/01016 . . Versatile peroxidase (1.11.1.16)
- 111/01017 . . Glutathione amide-dependent peroxidase (1.11.1.17)
- 111/01018 . . Bromide peroxidase (1.11.1.18)
- 111/01019 . . Dye decolorizing peroxidase (1.11.1.19)
- 111/0102 . . Prostamide/prostaglandin F<sub>2</sub>-alpha synthase (1.11.1.20)
- 111/01021 . . Catalase-peroxidase (1.11.1.21)
- 111/01802 . . Chloride peroxidase (vanadium-containing) (1.11.1.B2)
- 111/01806 . . Iodide peroxidase (vanadium-containing) (1.11.1.B6)
- 111/01807 . . Bromide peroxidase (heme-containing) (1.11.1.B7)
- 111/01808 . . Bromide peroxidase (metal-containing) (1.11.1.B8)
- 111/02 . . with H<sub>2</sub>O<sub>2</sub> as acceptor, one oxygen atom of which is incorporated into the product (1.11.2)
- 111/02001 . . Unspecific peroxygenase (1.11.2.1)
- 111/02002 . . Myeloperoxidase (1.11.2.2)
- 111/02003 . . Plant seed peroxygenase (1.11.2.3)
- 111/02004 . . Fatty-acid peroxygenase (1.11.2.4)
- 112/00 Oxidoreductases acting on hydrogen as donor (1.12)**
- 112/01 . . with NAD<sup>+</sup> or NADP<sup>+</sup> as acceptor (1.12.1)
- 112/01002 . . Hydrogen dehydrogenase (1.12.1.2)
- 112/01003 . . Hydrogen dehydrogenase (NADP<sup>+</sup>) (1.12.1.3)
- 112/01004 . . Hydrogenase (NAD<sup>+</sup>, ferredoxin)(1.12.1.4)
- 112/02 . . with a cytochrome as acceptor (1.12.2)
- 112/02001 . . Cytochrome-c3 hydrogenase (1.12.2.1)
- 112/05 . . with a quinone or similar compound as acceptor (1.12.5)
- 112/05001 . . Hydrogen:quinone oxidoreductase (1.12.5.1)
- 112/07 . . with an iron-sulfur protein as acceptor (1.12.7)



- 112/07002 . . Ferredoxin hydrogenase (1.12.7.2)  
 112/98 . . with other, known, acceptors (1.12.98)  
 112/98001 . . Coenzyme F420 hydrogenase (1.12.98.1)  
 112/98002 . . 5,10-Methenyltetrahydromethanopterin hydrogenase (1.12.98.2)  
 112/98003 . . Methanosarcina-phenazine hydrogenase (1.12.98.3)  
 112/99 . . with other acceptors (1.12.99)  
 112/99006 . . Hydrogenase (acceptor) (1.12.99.6)
- 113/00 Oxidoreductases acting on single donors with incorporation of molecular oxygen (oxygenases) (1.13)**
- 113/11 . . with incorporation of two atoms of oxygen (1.13.11)  
 113/11001 . . Catechol 1,2-dioxygenase (1.13.11.1)  
 113/11002 . . Catechol 2,3-dioxygenase (1.13.11.2)  
 113/11003 . . Protocatechuate 3,4-dioxygenase (1.13.11.3)  
 113/11004 . . Gentisate 1,2-dioxygenase (1.13.11.4)  
 113/11005 . . Homogentisate 1,2-dioxygenase (1.13.11.5)  
 113/11006 . . 3-Hydroxyanthranilate 3,4-dioxygenase (1.13.11.6)  
 113/11008 . . Protocatechuate 4,5-dioxygenase (1.13.11.8)  
 113/11009 . . 2,5-Dihydroxypyridine 5,6-dioxygenase (1.13.11.9)  
 113/1101 . . 7,8-Dihydroxykynurenate 8,8a-dioxygenase (1.13.11.10)  
 113/11011 . . Tryptophan 2,3-dioxygenase (1.13.11.11), i.e. indoleamine 2,3-dioxygenase 2  
 113/11012 . . Linoleate 13S-lipoxygenase (1.13.11.12)  
 113/11014 . . 2,3-Dihydroxybenzoate 3,4-dioxygenase (1.13.11.14)  
 113/11015 . . 3,4-Dihydroxyphenylacetate 2,3-dioxygenase (1.13.11.15)  
 113/11016 . . 3-Carboxyethylcatechol 2,3-dioxygenase (1.13.11.16)  
 113/11017 . . Indole 2,3-dioxygenase (1.13.11.17)  
 113/11018 . . Sulfur dioxygenase (1.13.11.18)  
 113/11019 . . Cysteamine dioxygenase (1.13.11.19)  
 113/1102 . . Cysteine dioxygenase (1.13.11.20)  
 113/11022 . . Caffeate 3,4-dioxygenase (1.13.11.22)  
 113/11023 . . 2,3-Dihydroxyindole 2,3-dioxygenase (1.13.11.23)  
 113/11024 . . Quercetin 2,3-dioxygenase (1.13.11.24)  
 113/11025 . . 3,4-Dihydroxy-9,10-secoandrosta-1,3,5(10)-triene-9,17-dione 4,5-dioxygenase (1.13.11.25)  
 113/11026 . . Peptide-tryptophan 2,3-dioxygenase (1.13.11.26)  
 113/11027 . . 4-Hydroxyphenylpyruvate dioxygenase (1.13.11.27)  
 113/11028 . . 2,3-Dihydroxybenzoate 2,3-dioxygenase (1.13.11.28)  
 113/11029 . . Stizolobate synthase (1.13.11.29)  
 113/1103 . . Stizolobinate synthase (1.13.11.30)  
 113/11031 . . Arachidonate 12-lipoxygenase (1.13.11.31), i.e. lipoxygenase-type-12  
 113/11033 . . Arachidonate 15-lipoxygenase (1.13.11.33)  
 113/11034 . . Arachidonate 5-lipoxygenase (1.13.11.34)  
 113/11035 . . Pyrogallol 1,2-oxygenase (1.13.11.35)  
 113/11036 . . Chloridazon-catechol dioxygenase (1.13.11.36)  
 113/11037 . . Hydroxyquinol 1,2-dioxygenase (1.13.11.37)  
 113/11038 . . 1-Hydroxy-2-naphthoate 1,2-dioxygenase (1.13.11.38)  
 113/11039 . . Biphenyl-2,3-diol 1,2-dioxygenase (1.13.11.39)  
 113/1104 . . Arachidonate 8-lipoxygenase (1.13.11.40)  
 113/11041 . . 2,4'-Dihydroxyacetophenone dioxygenase (1.13.11.41)  
 113/11043 . . Lignostilbene alpha-beta-dioxygenase (1.13.11.43)  
 113/11044 . . Linoleate diol synthase (1.13.11.44)  
[\(C12Y 113/1106, C12Y 504/04006 take precedence\)](#)  
 113/11045 . . Linoleate 11-lipoxygenase (1.13.11.45)  
 113/11046 . . 4-Hydroxymandelate synthase (1.13.11.46)  
 113/11047 . . 3-Hydroxy-4-oxoquinoline 2,4-dioxygenase (1.13.11.47)  
 113/11048 . . 3-Hydroxy-2-methylquinolin-4-one 2,4-dioxygenase (1.13.11.48)  
 113/11049 . . Chlorite O<sub>2</sub>-lyase (1.13.11.49)  
 113/1105 . . Acetylacetone-cleaving enzyme (1.13.11.50)  
 113/11051 . . 9-Cis-epoxycarotenoid dioxygenase (1.13.11.51)  
 113/11052 . . Indoleamine 2,3-dioxygenase (1.13.11.52), i.e. indoleamine 2,3-dioxygenase 1  
 113/11053 . . Acireductone dioxygenase (Ni<sup>2+</sup>-requiring) (1.13.11.53)  
 113/11054 . . Acireductone dioxygenase (Fe(2+)-requiring) (1.13.11.54)  
 113/11055 . . Sulfur oxygenase/reductase (1.13.11.55)  
 113/11056 . . 1,2-Dihydroxynaphthalene dioxygenase (1.13.11.56)  
 113/11057 . . Gallate dioxygenase (1.13.11.57)  
 113/11058 . . Linoleate 9S-lipoxygenase (1.13.11.58)  
 113/11059 . . Torulene dioxygenase (1.13.11.59)  
 113/1106 . . Linoleate 8R-lipoxygenase (1.13.11.60)  
 113/11061 . . Linoleate 9R-lipoxygenase (1.13.11.61)  
 113/11062 . . Linoleate 10R-lipoxygenase (1.13.11.62)  
 113/11063 . . Beta-carotene 15,15'-dioxygenase (1.13.11.63)  
 113/11064 . . 5-Nitrosalicylate dioxygenase (1.13.11.64)  
 113/11065 . . Carotenoid isomeroxygenase (1.13.11.65)  
 113/11066 . . Hydroquinone 1,2-dioxygenase (1.13.11.66)  
 113/11067 . . 8'-Apo-beta-carotenoid 14',13'-cleaving dioxygenase (1.13.11.67)  
 113/11068 . . 9-Cis-beta-carotene 9',10'-cleaving dioxygenase (1.13.11.68)  
 113/11069 . . Carlactone synthase (1.13.11.69)  
 113/1107 . . All-trans-10'-apo-beta-carotenal 13,14-cleaving dioxygenase (1.13.11.70)  
 113/11071 . . Carotenoid-9',10'-cleaving dioxygenase (1.13.11.71)  
 113/11072 . . 2-Hydroxyethylphosphonate dioxygenase (1.13.11.72)  
 113/11073 . . Methylphosphonate synthase (1.13.11.73)  
 113/12 . . with incorporation of one atom of oxygen (internal monooxygenases or internal mixed function oxidases)(1.13.12)  
 113/12001 . . Arginine 2-monooxygenase (1.13.12.1)  
 113/12002 . . Lysine 2-monooxygenase (1.13.12.2)  
 113/12003 . . Tryptophan 2-monooxygenase (1.13.12.3)  
 113/12004 . . Lactate 2-monooxygenase (1.13.12.4)  
 113/12005 . . Renilla-luciferin 2-monooxygenase (1.13.12.5), i.e. renilla-luciferase  
 113/12006 . . Cypridina-luciferin 2-monooxygenase (1.13.12.6), i.e. cypridina-luciferase  
 113/12007 . . Photinus-luciferin 4-monooxygenase (ATP-hydrolysing) (1.13.12.7), i.e. firefly-luciferase  
 113/12008 . . Watasenia-luciferin 2-monooxygenase (1.13.12.8)  
 113/12009 . . Phenylalanine 2-monooxygenase (1.13.12.9)

- 113/12013 . . Oplophorus-luciferin 2-monooxygenase (1.13.12.13)
- 113/12015 . . 3,4-Dihydroxyphenylalanine oxidative deaminase (1.13.12.15)
- 113/12016 . . Nitronate monooxygenase (1.13.12.16)
- 113/12017 . . Dichloroarcyriaflavin A synthase (1.13.12.17)
- 113/12018 . . Dinoflagellate luciferase (1.13.12.18)
- 113/12019 . . 2-Oxoglutarate dioxygenase (ethylene-forming) (1.13.12.19)
- 113/99 . Miscellaneous (1.13.99)
- 113/99001 . . Inositol oxygenase (1.13.99.1), i.e. myo-inositol oxygenase
- 113/99003 . . Tryptophan 2'-dioxygenase (1.13.99.3), i.e. indole-3-alkane-alpha-hydroxylase
- 114/00 Oxidoreductases acting on paired donors, with incorporation or reduction of molecular oxygen (1.14)**
- 114/11 . with 2-oxoglutarate as one donor, and incorporation of one atom each of oxygen into both donors (1.14.11)
- 114/11001 . . Gamma-butyrobetaine dioxygenase (1.14.11.1)
- 114/11002 . . Procollagen-proline dioxygenase (1.14.11.2), i.e. proline-hydroxylase
- 114/11003 . . Pyrimidine-deoxynucleoside 2'-dioxygenase (1.14.11.3)
- 114/11004 . . Procollagen-lysine 5-dioxygenase (1.14.11.4), i.e. lysine-hydroxylase
- 114/11006 . . Thymine dioxygenase (1.14.11.6)
- 114/11007 . . Procollagen-proline 3-dioxygenase (1.14.11.7)
- 114/11008 . . Trimethyllysine dioxygenase (1.14.11.8)
- 114/11009 . . Flavanone 3-dioxygenase (1.14.11.9), i.e. naringenin-3-dioxygenase
- 114/1101 . . Pyrimidine-deoxynucleoside 1'-dioxygenase (1.14.11.10)
- 114/11011 . . Hyoscyamine (6S)-dioxygenase (1.14.11.11)
- 114/11012 . . Gibberellin-44 dioxygenase (1.14.11.12)
- 114/11013 . . Gibberellin 2-beta-dioxygenase (1.14.11.13)
- 114/11014 . . 6-Beta-hydroxyhyoscyamine epoxidase (1.14.11.14)
- 114/11015 . . Gibberellin 3-beta-dioxygenase (1.14.11.15)
- 114/11016 . . Peptide-aspartate beta-dioxygenase (1.14.11.16), i.e. aspartyl (asparaginyl) beta-hydroxylase
- 114/11017 . . Taurine dioxygenase (1.14.11.17)
- 114/11018 . . Phytanoyl-CoA dioxygenase (1.14.11.18)
- 114/11019 . . Leucocyanidin oxygenase (1.14.11.19)
- 114/1102 . . Deacetoxyvindoline 4-hydroxylase (1.14.11.20)
- 114/11021 . . Clavaminate synthase (1.14.11.21)
- 114/11022 . . Flavone synthase (1.14.11.22)
- 114/11023 . . Flavonol synthase (1.14.11.23)
- 114/11024 . . 2'-Deoxymugineic-acid 2'-dioxygenase (1.14.11.24)
- 114/11025 . . Mugineic-acid 3-dioxygenase (1.14.11.25)
- 114/11026 . . Deacetoxycephalosporin-C hydroxylase (1.14.11.26)
- 114/11027 . . [Histone H3]-lysine-36 demethylase (1.14.11.27)
- 114/11028 . . Proline 3-hydroxylase (1.14.11.28)
- 114/11029 . . Hypoxia-inducible factor-proline dioxygenase (1.14.11.29)
- 114/1103 . . Hypoxia-inducible factor-asparagine dioxygenase (1.14.11.30)
- 114/11031 . . Thebaine 6-O-demethylase (1.14.11.31)
- 114/11032 . . Codeine 3-O-demethylase (1.14.11.32)
- 114/11033 . . DNA oxidative demethylase (1.14.11.33)
- 114/11034 . . 2-Oxoglutarate/L-arginine monooxygenase/decarboxylase (succinate-forming) (1.14.11.34)
- 114/11035 . . 1-Deoxypentalenic acid 11beta-hydroxylase (1.14.11.35)
- 114/11036 . . Pentalenolactone F synthase (1.14.11.36)
- 114/12 . with NADH or NADPH as one donor, and incorporation of two atoms of oxygen into one donor (1.14.12)
- 114/12001 . . Anthranilate 1,2-dioxygenase (deaminating, decarboxylating)(1.14.12.1)
- 114/12003 . . Benzene 1,2-dioxygenase (1.14.12.3)
- 114/12004 . . 3-Hydroxy-2-methylpyridinecarboxylate dioxygenase (1.14.12.4)
- 114/12005 . . 5-Pyridoxate dioxygenase (1.14.12.5)
- 114/12007 . . Phthalate 4,5-dioxygenase (1.14.12.7)
- 114/12008 . . 4-Sulfobenzoate 3,4-dioxygenase (1.14.12.8)
- 114/12009 . . 4-Chlorophenylacetate 3,4-dioxygenase (1.14.12.9)
- 114/1201 . . Benzoate 1,2-dioxygenase (1.14.12.10)
- 114/12011 . . Toluene dioxygenase (1.14.12.11)
- 114/12012 . . Naphthalene 1,2-dioxygenase (1.14.12.12)
- 114/12013 . . 2-Halobenzoate 1,2-dioxygenase (1.14.12.13)
- 114/12014 . . 2-Aminobenzenesulfonate 2,3-dioxygenase (1.14.12.14)
- 114/12015 . . Terephthalate 1,2-dioxygenase (1.14.12.15)
- 114/12016 . . 2-Hydroxyquinoline 5,6-dioxygenase (1.14.12.16)
- 114/12017 . . Nitric oxide dioxygenase (1.14.12.17)
- 114/12018 . . Biphenyl 2,3-dioxygenase (1.14.12.18)
- 114/12019 . . 3-Phenylpropanoate dioxygenase (1.14.12.19)
- 114/1202 . . Pheophorbide a oxygenase (1.14.12.20)
- 114/12021 . . Benzoyl-CoA 2,3-dioxygenase (1.14.12.21)
- 114/12022 . . Carbazole 1,9a-dioxygenase (1.14.12.22)
- 114/13 . with NADH or NADPH as one donor, and incorporation of one atom of oxygen (1.14.13)
- 114/13001 . . Salicylate 1-monooxygenase (1.14.13.1)
- 114/13002 . . 4-Hydroxybenzoate 3-monooxygenase (1.14.13.2)
- 114/13004 . . Melilotate 3-monooxygenase (1.14.13.4)
- 114/13005 . . Imidazoleacetate 4-monooxygenase (1.14.13.5)
- 114/13006 . . Orcinol 2-monooxygenase (1.14.13.6)
- 114/13007 . . Phenol 2-monooxygenase (1.14.13.7)
- 114/13008 . . Flavin-containing monooxygenase (1.14.13.8), i.e. dimethylaniline-monooxygenase
- 114/13009 . . Kynurenine 3-monooxygenase (1.14.13.9)
- 114/1301 . . 2,6-Dihydropyridine 3-monooxygenase (1.14.13.10)
- 114/13011 . . Trans-cinnamate 4-monooxygenase (1.14.13.11)
- 114/13012 . . Benzoate 4-monooxygenase (1.14.13.12)
- 114/13013 . . Calcidiol 1-monooxygenase (1.14.13.13), i.e. 25-hydroxyvitamin D-1-alpha-hydroxylase
- 114/13014 . . Trans-cinnamate 2-monooxygenase (1.14.13.14)
- 114/13015 . . Cholestanetriol 26-monooxygenase (1.14.13.15)
- 114/13016 . . Cyclopentanone monooxygenase (1.14.13.16)
- 114/13017 . . Cholesterol 7-alpha-monooxygenase (1.14.13.17)
- 114/13018 . . 4-Hydroxyphenylacetate 1-monooxygenase (1.14.13.18)
- 114/13019 . . Taxifolin 8-monooxygenase (1.14.13.19)
- 114/1302 . . 2,4-Dichlorophenol 6-monooxygenase (1.14.13.20)
- 114/13021 . . Flavonoid 3'-monooxygenase (1.14.13.21)
- 114/13022 . . Cyclohexanone monooxygenase (1.14.13.22)



114/13023	. . 3-Hydroxybenzoate 4-monooxygenase (1.14.13.23)	114/13069	. . Alkene monooxygenase (1.14.13.69)
114/13024	. . 3-Hydroxybenzoate 6-monooxygenase (1.14.13.24)	114/1307	. . Sterol 14-demethylase (1.14.13.70)
114/13025	. . Methane monooxygenase (1.14.13.25)	114/13071	. . N-Methylcoclaurine 3'-monooxygenase (1.14.13.71)
114/13026	. . Phosphatidylcholine 12-monooxygenase (1.14.13.26)	114/13072	. . Methylsterol monooxygenase (1.14.13.72)
114/13027	. . 4-Aminobenzoate 1-monooxygenase (1.14.13.27)	114/13073	. . Tabersonine 16-hydroxylase (1.14.13.73)
114/13028	. . 3,9-Dihydroxypterocarpan 6A-monooxygenase (1.14.13.28)	114/13074	. . 7-Deoxyloganin 7-hydroxylase (1.14.13.74)
114/13029	. . 4-Nitrophenol 2-monooxygenase (1.14.13.29)	114/13075	. . Vinorine hydroxylase (1.14.13.75)
114/1303	. . Leukotriene-B4 20-monooxygenase (1.14.13.30), i.e. leukotriene-B4-omega-hydroxylase	114/13076	. . Taxane 10-beta-hydroxylase (1.14.13.76)
114/13031	. . 2-Nitrophenol 2-monooxygenase (1.14.13.31)	114/13077	. . Taxane 13-alpha-hydroxylase (1.14.13.77)
114/13032	. . Albendazole monooxygenase (1.14.13.32)	114/13078	. . Ent-kaurene oxidase (1.14.13.78)
114/13033	. . 4-Hydroxybenzoate 3-monooxygenase (NAD(P)H)(1.14.13.33)	114/13079	. . Ent-kaurenoic acid oxidase (1.14.13.79)
114/13034	. . Leukotriene-E4 20-monooxygenase (1.14.13.34)	114/1308	. . (R)-Limonene 6-monooxygenase (1.14.13.80)
114/13035	. . Anthranilate 3-monooxygenase (deaminating) (1.14.13.35)	114/13081	. . Magnesium-protoporphyrin IX monomethyl ester (oxidative) cyclase (1.14.13.81)
114/13036	. . 5-O-(4-Coumaroyl)-D-quinic acid 3'-monooxygenase (1.14.13.36)	114/13082	. . Vanillate monooxygenase (1.14.13.82)
114/13037	. . Methyltetrahydroprotoberberine 14-monooxygenase (1.14.13.37)	114/13083	. . Precorrin-3B synthase (1.14.13.83)
114/13038	. . Anhydrotetracycline monooxygenase (1.14.13.38)	114/13084	. . 4-Hydroxyacetophenone monooxygenase (1.14.13.84)
114/13039	. . Nitric-oxide synthase (NADPH dependent) (1.14.13.39)	114/13085	. . Glyceollin synthase (1.14.13.85)
114/1304	. . Anthraniloyl-CoA monooxygenase (1.14.13.40)	114/13086	. . 2-Hydroxyisoflavanone synthase (1.14.13.86)
114/13041	. . Tyrosine N-monooxygenase (1.14.13.41)	114/13087	. . Licodione synthase (1.14.13.87)
114/13043	. . Questin monooxygenase (1.14.13.43)	114/13088	. . Flavonoid 3',5'-hydroxylase (1.14.13.88)
114/13044	. . 2-Hydroxybiphenyl 3-monooxygenase (1.14.13.44)	114/13089	. . Isoflavone 2'-hydroxylase (1.14.13.89)
114/13046	. . (-)-Menthol monooxygenase (1.14.13.46)	114/1309	. . Zeaxanthin epoxidase (1.14.13.90)
114/13047	. . (S)-Limonene 3-monooxygenase (1.14.13.47)	114/13091	. . Deoxysarpagine hydroxylase (1.14.13.91)
114/13048	. . (S)-Limonene 6-monooxygenase (1.14.13.48)	114/13092	. . Phenylacetone monooxygenase (1.14.13.92)
114/13049	. . (S)-Limonene 7-monooxygenase (1.14.13.49)	114/13093	. . (+)-Abscissic acid 8'-hydroxylase (1.14.13.93)
114/1305	. . Pentachlorophenol monooxygenase (1.14.13.50)	114/13094	. . Lithocholate 6-beta-hydroxylase (1.14.13.94)
114/13051	. . 6-Oxocineole dehydrogenase (1.14.13.51)	114/13095	. . 7-Alpha-hydroxycholest-4-en-3-one 12-alpha-hydroxylase (1.14.13.95)
114/13052	. . Isoflavone 3'-hydroxylase (1.14.13.52)	114/13096	. . 5-Beta-cholestane-3-alpha,7-alpha-diol 12-alpha-hydroxylase (1.14.13.96)
114/13053	. . 4'-Methoxyisoflavone 2'-hydroxylase (1.14.13.53)	114/13097	. . Taurochenodeoxycholate 6-alpha-hydroxylase (1.14.13.97)
114/13054	. . Ketosteroid monooxygenase (1.14.13.54)	114/13098	. . Cholesterol 24-hydroxylase (1.14.13.98)
114/13055	. . Protopine 6-monooxygenase (1.14.13.55)	114/13099	. . 24-Hydroxycholesterol 7-alpha-hydroxylase (1.14.13.99)
114/13056	. . Dihydrosanguinarine 10-monooxygenase (1.14.13.56)	114/131	. . 25-Hydroxycholesterol 7-alpha-hydroxylase (1.14.13.100)
114/13057	. . Dihydrochelirubine 12-monooxygenase (1.14.13.57)	114/13101	. . Senecionine N-oxygenase (1.14.13.101)
114/13058	. . Benzoyl-CoA 3-monooxygenase (1.14.13.58)	114/13102	. . Psoralen synthase (1.14.13.102)
114/13059	. . L-Lysine N6-monooxygenase (NADPH) (1.14.13.59)	114/13103	. . 8-Dimethylallylnaringenin 2'-hydroxylase (1.14.13.103)
114/1306	. . 27-Hydroxycholesterol 7-alpha-monooxygenase (1.14.13.60)	114/13104	. . (+)-Menthofuran synthase (1.14.13.104)
114/13061	. . 2-Hydroxyquinoline 8-monooxygenase (1.14.13.61)	114/13105	. . Monocyclic monoterpene ketone monooxygenase (1.14.13.105)
114/13062	. . 4-Hydroxyquinoline 3-monooxygenase (1.14.13.62)	114/13106	. . Epi-isozizaene 5-monooxygenase (1.14.13.106)
114/13063	. . 3-Hydroxyphenylacetate 6-hydroxylase (1.14.13.63)	114/13107	. . Limonene 1,2-monooxygenase (1.14.13.107)
114/13064	. . 4-Hydroxybenzoate 1-hydroxylase (1.14.13.64)	114/13108	. . Abieta-7,13-diene hydroxylase (1.14.13.108)
114/13066	. . 2-Hydroxycyclohexanone 2-monooxygenase (1.14.13.66)	114/13109	. . Abieta-7,13-dien-18-ol hydroxylase (1.14.13.109)
114/13067	. . Quinine 3-monooxygenase (1.14.13.67)	114/1311	. . Geranylgeraniol 18-hydroxylase (1.14.13.110)
114/13068	. . 4-Hydroxyphenylacetaldehyde oxime monooxygenase (1.14.13.68)	114/13111	. . Methanesulfonate monooxygenase (1.14.13.111)
		114/13112	. . 3-Epi-6-deoxocathasterone 23-monooxygenase (1.14.13.112)
		114/13113	. . FAD-dependent urate hydroxylase (1.14.13.113)
		114/13114	. . 6-Hydroxynicotinate 3-monooxygenase (1.14.13.114)
		114/13115	. . Angelicin synthase (1.14.13.115)
		114/13116	. . Geranylhydroquinone 3"-hydroxylase (1.14.13.116)
		114/13117	. . Isoleucine N-monooxygenase (1.14.13.117)

- 114/13118 . . Valine N-monooxygenase (1.14.13.118)
- 114/13119 . . 5-Epiaristolochene 1,3-dihydroxylase (1.14.13.119)
- 114/1312 . . Costunolide synthase (1.14.13.120)
- 114/13121 . . Premnaspirodienene oxygenase (1.14.13.121)
- 114/13122 . . Chlorophyllide-a oxygenase (1.14.13.122)
- 114/13123 . . Germacrene A hydroxylase (1.14.13.123)
- 114/13124 . . Phenylalanine N-monooxygenase (1.14.13.124)
- 114/13125 . . Tryptophan N-monooxygenase (1.14.13.125)
- 114/13126 . . Vitamin D3 24-hydroxylase (1.14.13.126)
- 114/13127 . . 3-(3-Hydroxy-phenyl)propanoic acid hydroxylase (1.14.13.127)
- 114/13128 . . 7-Methylxanthine demethylase (1.14.13.128)
- 114/13129 . . Beta-carotene 3-hydroxylase (1.14.13.129)
- 114/1313 . . Pyrrole-2-carboxylate monooxygenase (1.14.13.130)
- 114/13131 . . Dimethyl-sulfide monooxygenase (1.14.13.131)
- 114/13132 . . Squalene monooxygenase (1.14.13.132)
- 114/13133 . . Pentalenene oxygenase (1.14.13.133)
- 114/13134 . . Beta-amyrin 11-oxidase (1.14.13.134)
- 114/13135 . . 1-Hydroxy-2-naphthoate hydroxylase (1.14.13.135)
- 114/13136 . . Isoflavonoid synthase (1.14.13.136)
- 114/13137 . . Indole-2-monooxygenase (1.14.13.137)
- 114/13138 . . Indolin-2-one monooxygenase (1.14.13.138)
- 114/13139 . . 3-Hydroxyindolin-2-one monooxygenase (1.14.13.139)
- 114/1314 . . 2-Hydroxy-1,4-benzoxazin-3-one monooxygenase (1.14.13.140)
- 114/13141 . . Cholest-4-en-3-one 26-monooxygenase (1.14.13.141)
- 114/13142 . . 3-Ketosteroid 9alpha-monooxygenase (1.14.13.142)
- 114/13143 . . Ent-isokaurene C2-hydroxylase (1.14.13.143)
- 114/13144 . . 9Beta-pimara-7,15-diene oxidase (1.14.13.144)
- 114/13145 . . Ent-cassa-12,15-diene 11-hydroxylase (1.14.13.145)
- 114/13146 . . Taxoid 14beta-hydroxylase (1.14.13.146)
- 114/13147 . . Taxoid 7beta-hydroxylase (1.14.13.147)
- 114/13148 . . Trimethylamine monooxygenase (1.14.13.148)
- 114/13149 . . Phenylacetyl-CoA 1,2-epoxidase (1.14.13.149)
- 114/1315 . . Alpha-humulene 10-hydroxylase (1.14.13.150)
- 114/13151 . . Linalool 8-monooxygenase (1.14.13.151)
- 114/13152 . . Geraniol 8-hydroxylase (1.14.13.152)
- 114/13153 . . (+)-Sabinene 3-hydroxylase (1.14.13.153)
- 114/13154 . . Erythromycin 12 hydroxylase (1.14.13.154)
- 114/13155 . . Alpha-pinene monooxygenase (1.14.13.155)
- 114/13156 . . 1,8-Cineole 2-endo-monooxygenase (1.14.13.156)
- 114/13157 . . 1,8-Cineole 2-exo-monooxygenase (1.14.13.157)
- 114/13158 . . Amorpha-4,11-diene 12-monooxygenase (1.14.13.158)
- 114/13159 . . Vitamin D 25-hydroxylase (1.14.13.159)
- 114/1316 . . (2,2,3-Trimethyl-5-oxocyclopent-3-enyl)acetyl-CoA 1,5-monooxygenase (1.14.13.160)
- 114/13161 . . (+)-Camphor 6-exo-hydroxylase (1.14.13.161)
- 114/13162 . . 2,5-Diketocamphane 1,2-monooxygenase (1.14.13.162), i.e. camphor 1,2-monooxygenase
- 114/13163 . . 6-Hydroxy-3-succinoylpyridine 3-monooxygenase (1.14.13.163)
- 114/13165 . . Nitric-oxide synthase [NAD(P)H-dependent] (1.14.13.165)
- 114/13166 . . 4-Nitrocatechol 4-monooxygenase (1.14.13.166)
- 114/13167 . . 4-Nitrophenol 4-monooxygenase (1.14.13.167)
- 114/13168 . . Indole-3-pyruvate monooxygenase (1.14.13.168)
- 114/13169 . . Sphinganine C4-monooxygenase (1.14.13.169)
- 114/1317 . . Pentalenolactone D synthase (1.14.13.170)
- 114/13171 . . Neopentalenolactone D synthase (1.14.13.171)
- 114/1381 . . L-Ornithine N5-monooxygenase (1.14.13.B10)
- 114/14 . . with reduced flavin or flavoprotein as one donor, and incorporation of one atom of oxygen (1.14.14)
- 114/14001 . . Unspecific monooxygenase (1.14.14.1)
- 114/14003 . . Alkanal monooxygenase FMN (1.14.14.3), i.e. bacterial-luciferase
- 114/14005 . . Alkanesulfonate monooxygenase (1.14.14.5)
- 114/14007 . . Tryptophan 7-halogenase (1.14.14.7)
- 114/14008 . . Anthranilate 3-monooxygenase (FAD) (1.14.14.8)
- 114/14009 . . 4-Hydroxyphenylacetate 3-monooxygenase (1.14.14.9)
- 114/1401 . . Nitritotriacetate monooxygenase (1.14.14.10)
- 114/14011 . . Styrene monooxygenase (1.14.14.11)
- 114/14012 . . 3-Hydroxy-9,10-seconandrost-1,3,5(10)-triene-9,17-dione monooxygenase (1.14.14.12)
- 114/14013 . . 4-(L-Gamma-glutamylamino)butanoyl-[BtrI acyl-carrier protein] monooxygenase (1.14.14.13)
- 114/15 . . with reduced iron-sulfur protein as one donor, and incorporation of one atom of oxygen (1.14.15)
- 114/15001 . . Camphor 5-monooxygenase (1.14.15.1)
- 114/15003 . . Alkane 1-monooxygenase (1.14.15.3)
- 114/15004 . . Steroid 11-beta-monooxygenase (1.14.15.4)
- 114/15005 . . Corticosterone 18-monooxygenase (1.14.15.5)
- 114/15006 . . Cholesterol monooxygenase (side-chain-cleaving) (1.14.15.6), i.e. cytochrome P450scs
- 114/15007 . . Choline monooxygenase (1.14.15.7)
- 114/15008 . . Steroid 15-beta-monooxygenase (1.14.15.8)
- 114/15009 . . Spheroidene monooxygenase (1.14.15.9)
- 114/1501 . . (+)-Camphor 6-endo-hydroxylase (1.14.15.10)
- 114/15011 . . Pentalenic acid synthase (1.14.15.11)
- 114/15802 . . Spheroidene monooxygenase (1.14.15.B2), i.e. acyclic carotenoid 2-ketolase
- 114/16 . . with reduced pteridine as one donor, and incorporation of one atom of oxygen (1.14.16)
- 114/16001 . . Phenylalanine 4-monooxygenase (1.14.16.1)
- 114/16002 . . Tyrosine 3-monooxygenase (1.14.16.2)
- 114/16003 . . Anthranilate 3-monooxygenase (1.14.16.3)
- 114/16004 . . Tryptophan 5-monooxygenase (1.14.16.4)
- 114/16005 . . Alkylglycerol monooxygenase (1.14.16.5)
- 114/16006 . . Mandelate 4-monooxygenase (1.14.16.6)
- 114/17 . . with reduced ascorbate as one donor, and incorporation of one atom of oxygen (1.14.17)
- 114/17001 . . Dopamine beta-monooxygenase (1.14.17.1)
- 114/17003 . . Peptidylglycine monooxygenase (1.14.17.3)
- 114/17004 . . Aminocyclopropanecarboxylate oxidase (1.14.17.4), i.e. ethylene-forming enzyme
- 114/18 . . with another compound as one donor, and incorporation of one atom of oxygen (1.14.18)
- 114/18001 . . Tyrosinase (1.14.18.1)
- 114/18002 . . CMP-N-acetylneuraminase monooxygenase (1.14.18.2)
- 114/18003 . . Methane monooxygenase (particulate) (1.14.18.3)
- 114/19 . . with oxidation of a pair of donors resulting in the reduction of molecular oxygen to two molecules of water (1.14.19)
- 114/19001 . . Stearoyl-CoA 9-desaturase (1.14.19.1), i.e. DELTA9-desaturase

- 114/19002 . . Acyl-[acyl-carrier-protein] desaturase (1.14.19.2)  
 114/19003 . . Linoleoyl-CoA desaturase (1.14.19.3)  
 114/19004 . . DELTA8-fatty-acid desaturase (1.14.19.4)  
 114/19005 . . DELTA11-fatty-acid desaturase (1.14.19.5)  
 114/19006 . . DELTA12-fatty-acid desaturase (1.14.19.6), i.e. oleoyl-CoA DELTA12 desaturase  
 114/19007 . . (S)-2-Hydroxypropylphosphonic acid epoxidase (1.14.19.7)  
 114/20 . with 2-oxoglutarate as one donor, and the other dehydrogenated (1.14.20)  
 114/20001 . . Deacetoxycephalosporin-C synthase (1.14.20.1)  
 114/20002 . . 2,4-Dihydroxy-1,4-benzoxazin-3-one-glucoside dioxygenase (1.14.20.2)  
 114/21 . with NADH or NADPH as one donor, and the other dehydrogenated (1.14.21)  
 114/21001 . . (S)-Stylopine synthase (1.14.21.1)  
 114/21002 . . (S)-Cheilanthifoline synthase (1.14.21.2)  
 114/21003 . . Berbaminine synthase (1.14.21.3)  
 114/21004 . . Salutaridine synthase (1.14.21.4)  
 114/21005 . . (S)-Canadine synthase (1.14.21.5)  
 114/21006 . . Lathosterol oxidase (1.14.21.6), i.e. C-5 sterol desaturase  
 114/21007 . . Biflavinolin synthase (1.14.21.7)  
 114/21008 . . Pseudobaptigenin synthase (1.14.21.8)  
 114/99 . Miscellaneous (1.14.99)  
 114/99001 . . Prostaglandin-endoperoxide synthase (1.14.99.1), i.e. cyclooxygenase  
 114/99002 . . Kynurenine 7,8-hydroxylase (1.14.99.2)  
 114/99003 . . Heme oxygenase (1.14.99.3)  
 114/99004 . . Progesterone monooxygenase (1.14.99.4)  
 114/99007 . . Squalene monooxygenase (1.14.99.7)  
 114/99009 . . Steroid 17-alpha-monooxygenase (1.14.99.9), i.e. cytochrome-P450-steroid-17-alpha-hydroxylase  
 114/9901 . . Steroid 21-monooxygenase (1.14.99.10), i.e. steroid cytochrome P450 21-hydroxylase  
 114/99011 . . Estradiol 6-beta-monooxygenase (1.14.99.11)  
 114/99012 . . Androst-4-ene-3,17-dione monooxygenase (1.14.99.12)  
 114/99014 . . Progesterone 11-alpha-monooxygenase (1.14.99.14)  
 114/99015 . . 4-Methoxybenzoate monooxygenase (O-demethylating) (1.14.99.15)  
 114/99019 . . Plasmamylethanolamine desaturase (1.14.99.19)  
 114/9902 . . Phylloquinone monooxygenase (2,3-epoxidizing) (1.14.99.20)  
 114/99021 . . Latia-luciferin monooxygenase (demethylating) (1.14.99.21), i.e. Latia luciferase  
 114/99022 . . Ecdysone 20-monooxygenase (1.14.99.22)  
 114/99023 . . 3-Hydroxybenzoate 2-monooxygenase (1.14.99.23)  
 114/99024 . . Steroid 9-alpha-monooxygenase (1.14.99.24)  
 114/99026 . . 2-Hydroxypyridine 5-monooxygenase (1.14.99.26)  
 114/99027 . . Juglone 3-monooxygenase (1.14.99.27)  
 114/99029 . . Deoxyhypusine monooxygenase (1.14.99.29)  
 114/99031 . . Myristoyl-CoA 11-(E) desaturase (1.14.99.31)  
 114/99032 . . Myristoyl-CoA 11-(Z) desaturase (1.14.99.32)  
 114/99033 . . DELTA12-fatty acid dehydrogenase (1.14.99.33)  
 114/99034 . . Monoprenyl isoflavone epoxidase (1.14.99.34)  
 114/99035 . . Thiophene-2-carbonyl-CoA monooxygenase (1.14.99.35)  
 114/99036 . . Beta-carotene 15,15'-monooxygenase (1.14.99.36)  
 114/99037 . . Taxadiene 5-alpha-hydroxylase (1.14.99.37)  
 114/99038 . . Cholesterol 25-hydroxylase (1.14.99.38)  
 114/99039 . . Ammonia monooxygenase (1.14.99.39)  
 114/9904 . . 5,6-Dimethylbenzimidazole synthase (1.14.99.40)  
 114/99041 . . All-trans-8'-apo-beta-carotenal 15,15'-oxygenase (1.14.99.41)  
 114/99042 . . Zeaxanthin 7,8-dioxygenase (1.14.99.42)  
 114/99043 . . Beta-amyrin 24-hydroxylase (1.14.99.43)  
 114/99044 . . Diapolycopene oxygenase (1.14.99.44)  
 114/99045 . . Carotene epsilon-monooxygenase (1.14.99.45)  
 114/99046 . . Pyrimidine oxygenase (1.14.99.46)  
 114/99047 . . (+)-Larreatricin hydroxylase (1.14.99.47)  
**115/00 Oxidoreductases acting on superoxide as acceptor (1.15)**  
 115/01 . with NAD or NADP as acceptor (1.15.1)  
 115/01001 . . Superoxide dismutase (1.15.1.1)  
 115/01002 . . Superoxide reductase (1.15.1.2)  
**116/00 Oxidoreductases oxidizing metal ions (1.16)**  
 116/01 . with NAD<sup>+</sup> or NADP<sup>+</sup> as acceptor (1.16.1)  
 116/01001 . . Mercury(II) reductase (1.16.1.1)  
 116/01002 . . Diferric-transferrin reductase (1.16.1.2)  
 116/01003 . . Aquacobalamin reductase (1.16.1.3)  
 116/01004 . . Cob(II)alamin reductase (1.16.1.4)  
 116/01005 . . Aquacobalamin reductase (NADPH) (1.16.1.5)  
 116/01006 . . Cyanocobalamin reductase (cyanide-eliminating) (1.16.1.6)  
 116/01007 . . Ferric-chelate reductase (NADH) (1.16.1.7)  
 116/01008 . . [Methionine synthase] reductase (1.16.1.8)  
 116/01009 . . Ferric-chelate reductase (NADPH) (1.16.1.9)  
 116/03 . with oxygen as acceptor (1.16.3)  
 116/03001 . . Ferroxidase (1.16.3.1), i.e. ceruloplasmin  
 116/05 . with a quinone or similar compound as acceptor (1.16.5)  
 116/05001 . . Ascorbate ferrireductase (transmembrane) (1.16.5.1)  
 116/08 . with flavin as acceptor (1.16.8)  
 116/08001 . . Cob(II)yrinic acid a,c-diamide reductase (1.16.8.1)  
 116/09 . with a copper protein as acceptor (1.16.9)  
 116/09001 . . Iron:rusticyanin reductase (1.16.9.1)  
 116/98 . with other, known, acceptors (1.16.98)  
**117/00 Oxidoreductases acting on CH or CH<sub>2</sub> groups (1.17)**  
 117/01 . with NAD<sup>+</sup> or NADP<sup>+</sup> as acceptor (1.17.1)  
 117/01001 . . CDP-4-dehydro-6-deoxyglucose reductase (1.17.1.1)  
 117/01002 . . 4-Hydroxy-3-methylbut-2-enyl diphosphate reductase (1.17.1.2)  
 117/01003 . . Leucoanthocyanidin reductase (1.17.1.3)  
 117/01004 . . Xanthine dehydrogenase (1.17.1.4)  
 117/01005 . . Nicotinate dehydrogenase (1.17.1.5)  
 117/01007 . . 3-Oxo-5,6-dehydrosueryl-CoA semialdehyde dehydrogenase (1.17.1.7)  
 117/02 . with a cytochrome as acceptor (1.17.2)  
 117/02001 . . Nicotinate dehydrogenase (cytochrome) (1.17.2.1)  
 117/02002 . . Lupanine 17-hydroxylase (cytochrome c) (1.17.2.2)  
 117/03 . with oxygen as acceptor (1.17.3)  
 117/03001 . . Pteridine oxidase (1.17.3.1)  
 117/03002 . . Xanthine oxidase (1.17.3.2)

- 117/03003 . . 6-Hydroxynicotinate dehydrogenase (1.17.3.3)  
 117/04 . with a disulfide as acceptor (1.17.3)  
 117/04001 . . Ribonucleoside-diphosphate reductase (1.17.4.1)  
 117/04002 . . Ribonucleoside-triphosphate reductase (1.17.4.2)  
 117/05 . with a quinone or similar compound as acceptor (1.17.5)  
 117/05001 . . Phenylacetyl-CoA dehydrogenase (1.17.5.1)  
 117/05002 . . Caffeine dehydrogenase (1.17.5.2)  
 117/07 . with an iron-sulfur protein as acceptor (1.17.7)  
 117/07001 . . (E)-4-Hydroxy-3-methylbut-2-enyl-diphosphate synthase (1.17.7.1)  
 117/07002 . . 7-Hydroxymethyl chlorophyll a reductase (1.17.7.2)  
 117/99 . with other acceptors (1.17.99)  
 117/99001 . . 4-Methylphenol dehydrogenase (hydroxylating) (1.17.99.1)  
 117/99002 . . Ethylbenzene hydroxylase (1.17.99.2)  
 117/99003 . . 3-Alpha,7-alpha,12-alpha-trihydroxy-5-beta-cholestanoyl-CoA 24-hydroxylase (1.17.99.3)  
 117/99004 . . Uracil/thymine dehydrogenase (1.17.99.4)  
 117/99005 . . Bile-acid 7-alpha-dehydroxylase (1.17.99.5)
- 118/00 Oxidoreductases acting on iron-sulfur proteins as donors (1.18)**  
 118/01 . with NAD<sup>+</sup> or NADP<sup>+</sup> as acceptor (1.18.1)  
 118/01001 . . Rubredoxin--NAD<sup>+</sup> reductase (1.18.1.1)  
 118/01002 . . Ferredoxin-NADP<sup>+</sup> reductase (1.18.1.2)  
 118/01003 . . Ferredoxin--NAD<sup>+</sup> reductase (1.18.1.3)  
 118/01004 . . Rubredoxin--NAD(P)<sup>+</sup> reductase (1.18.1.4)  
 118/01005 . . Putidaredoxin--NAD<sup>+</sup> reductase (1.18.1.5)  
 118/01006 . . Adrenodoxin-NADP<sup>+</sup> reductase (1.18.1.6)  
 118/06 . with dinitrogen as acceptor (1.18.6)  
 118/06001 . . Nitrogenase (1.18.6.1)
- 119/00 Oxidoreductases acting on reduced flavodoxin as donor (1.19)**  
 119/06 . with dinitrogen as acceptor (1.19.6)  
 119/06001 . . Nitrogenase (flavodoxin) (1.19.6.1)
- 120/00 Oxidoreductases acting on phosphorus or arsenic in donors (1.20)**  
 120/01 . with NAD<sup>+</sup> or NADP<sup>+</sup> as acceptor (1.20.1)  
 120/01001 . . Phosphonate dehydrogenase (1.20.1.1)  
 120/02 . with a cytochrome as acceptor (1.20.2)  
 120/02001 . . Arsenate reductase (cytochrome c) (1.20.2.1)  
 120/04 . acting on phosphorus or arsenic in donors, with disulfide as acceptor (1.20.4)  
 120/04001 . . Arsenate reductase (1.20.4.1), i.e. glutaredoxin  
 120/04002 . . Methylarsonate reductase (1.20.4.2)  
 120/04003 . . Mycoredoxin (1.20.4.3)  
 120/09 . with a copper protein as acceptor (1.20.9)  
 120/09001 . . Arsenate reductase (azurin) (1.20.9.1)  
 120/99 . with other acceptors (1.20.99)  
 120/99001 . . Arsenate reductase (donor) (1.20.99.1)
- 121/00 Oxidoreductases acting on X-H and Y-H to form an X-Y bond (1.21)**  
 121/03 . with oxygen as acceptor (1.21.3)  
 121/03001 . . Isopenicillin-N synthase (1.21.3.1)  
 121/03002 . . Columbamine oxidase (1.21.3.2)  
 121/03003 . . Reticuline oxidase (1.21.3.3)  
 121/03004 . . Sulochrin oxidase ((+)-bisdechlorogeodin-forming)(1.21.3.4)  
 121/03005 . . Sulochrin oxidase ((-)-bisdechlorogeodin-forming)(1.21.3.5)  
 121/03006 . . Aureusidin synthase (1.21.3.6)  
 121/03007 . . Tetrahydrocannabinolic acid synthase (1.21.3.7)  
 121/03008 . . Cannabidiolic acid synthase (1.21.3.8)  
 121/04 . with a disulfide as acceptor (1.21.4)  
 121/04001 . . D-Proline reductase (dithiol) (1.21.4.1)  
 121/04002 . . Glycine reductase (1.21.4.2)  
 121/04003 . . Sarcosine reductase (1.21.4.3)  
 121/04004 . . Betaine reductase (1.21.4.4)  
 121/99 . with other acceptors (1.21.99)  
 121/99001 . . Beta-cyclopiasonate dehydrogenase (1.21.99.1)
- 122/00 Oxidoreductases acting on halogen in donors (1.22)**  
 122/01 . with NAD<sup>+</sup> or NADP<sup>+</sup> as acceptor (1.22.1)  
 122/01001 . . Iodotyrosine deiodinase (1.22.1.1)
- 197/00 Other oxidoreductases (1.97)**  
 197/01 . other oxidoreductases (1.97.1)  
 197/01001 . . Chlorate reductase (1.97.1.1)  
 197/01002 . . Pyrogallol hydroxytransferase (1.97.1.2)  
 197/01003 . . Sulfur reductase (1.97.1.3)  
 197/01004 . . [Formate-C-acetyltransferase]-activating enzyme (1.97.1.4)  
 197/01008 . . Tetrachloroethene reductive dehalogenase (1.97.1.8)  
 197/01009 . . Selenate reductase (1.97.1.9)  
 197/0101 . . Thyroxine 5'-deiodinase (1.97.1.10), i.e. deiodinase I or II  
 197/01011 . . Thyroxine 5-deiodinase (1.97.1.11), i.e. deiodinase III  
 197/01012 . . Photosystem I (1.97.1.12)
- 201/00 Transferases transferring one-carbon groups (2.1)**  
 201/01 . Methyltransferases (2.1.1)  
 201/01001 . . Nicotinamide N-methyltransferase (2.1.1.1)  
 201/01002 . . Guanidinoacetate N-methyltransferase (2.1.1.2)  
 201/01003 . . Thetin--homocysteine S-methyltransferase (2.1.1.3)  
 201/01004 . . Acetylserotonin O-methyltransferase (2.1.1.4)  
 201/01005 . . Betaine--homocysteine S-methyltransferase (2.1.1.5)  
 201/01006 . . Catechol O-methyltransferase (2.1.1.6)  
 201/01007 . . Nicotinate N-methyltransferase (2.1.1.7)  
 201/01008 . . Histamine N-methyltransferase (2.1.1.8)  
 201/01009 . . Thiol S-methyltransferase (2.1.1.9)  
 201/0101 . . Homocysteine S-methyltransferase (2.1.1.10)  
 201/01011 . . Magnesium protoporphyrin IX methyltransferase (2.1.1.11)  
 201/01012 . . Methionine S-methyltransferase (2.1.1.12)  
 201/01013 . . Methionine synthase (2.1.1.13)  
 201/01014 . . 5-Methyltetrahydropteroyltriglutamate--homocysteine S-methyltransferase (2.1.1.14)  
 201/01015 . . Fatty-acid O-methyltransferase (2.1.1.15)  
 201/01016 . . Methylene-fatty-acyl-phospholipid synthase (2.1.1.16)  
 201/01017 . . Phosphatidylethanolamine N-methyltransferase (2.1.1.17)  
 201/01018 . . Polysaccharide O-methyltransferase (2.1.1.18)  
 201/01019 . . Trimethylsulfonium--tetrahydrofolate N-methyltransferase (2.1.1.19)  
 201/0102 . . Glycine N-methyltransferase (2.1.1.20)  
 201/01021 . . Methylamine--glutamate N-methyltransferase (2.1.1.21)

201/01022	. . Carnosine N-methyltransferase (2.1.1.22)	201/01062	. . mRNA (2'-O-methyladenosine-N6-)-methyltransferase (2.1.1.62)
201/01023	. . Protein-arginine N-methyltransferase (2.1.1.23) ( <a href="#">C12Y 201/01124</a> - <a href="#">C12Y 201/01126</a> take precedence)	201/01063	. . Methylated-DNA-[protein]-cysteine S-methyltransferase (2.1.1.63), i.e. O6-methylguanine-DNA methyltransferase
201/01024	. . Protein-gamma-glutamate O-methyltransferase (2.1.1.24) ( <a href="#">C12Y 201/01077</a> , <a href="#">C12Y 201/0108</a> , <a href="#">C12Y 201/011</a> take precedence)	201/01064	. . 3-Demethylubiquinol 3-O-methyltransferase (2.1.1.64)
201/01025	. . Phenol O-methyltransferase (2.1.1.25)	201/01065	. . Licodione 2'-O-methyltransferase (2.1.1.65)
201/01026	. . Iodophenol O-methyltransferase (2.1.1.26)	201/01066	. . rRNA (adenosine-2'-O-)-methyltransferase (2.1.1.66)
201/01027	. . Tyramine N-methyltransferase (2.1.1.27)	201/01067	. . Thiopurine S-methyltransferase (2.1.1.67)
201/01028	. . Phenylethanolamine N-methyltransferase (2.1.1.28)	201/01068	. . Caffeate O-methyltransferase (2.1.1.68)
201/01029	. . tRNA (cytosine-5-)-methyltransferase (2.1.1.29) ( <a href="#">C12Y 201/01202</a> - <a href="#">C12Y 201/01204</a> take precedence)	201/01069	. . 5-Hydroxyfuranocoumarin 5-O-methyltransferase (2.1.1.69)
201/01031	. . tRNA (guanine-N1-)-methyltransferase (2.1.1.31) ( <a href="#">C12Y 201/01221</a> , <a href="#">C12Y 201/01228</a> take precedence)	201/0107	. . 8-Hydroxyfuranocoumarin 8-O-methyltransferase (2.1.1.70)
201/01032	. . tRNA (guanine-N2-)-methyltransferase (2.1.1.32) ( <a href="#">C12Y 201/01213</a> - <a href="#">C12Y 201/01216</a> take precedence)	201/01071	. . Phosphatidyl-N-methylethanolamine N-methyltransferase (2.1.1.71)
201/01033	. . tRNA (guanine-N7-)-methyltransferase (2.1.1.33)	201/01072	. . Site-specific DNA-methyltransferase (adenine-specific) (2.1.1.72)
201/01034	. . tRNA (guanosine18-2'-O)-methyltransferase (2.1.1.34)	201/01074	. . Methylenetetrahydrofolate--tRNA-(uracil54-C5)-methyltransferase (FADH2-oxidizing) (2.1.1.74)
201/01035	. . tRNA (uracil-5-)-methyltransferase (2.1.1.35)	201/01075	. . Apigenin 4'-O-methyltransferase (2.1.1.75)
201/01036	. . tRNA (adenine-N1-)-methyltransferase (2.1.1.36) ( <a href="#">C12Y 201/01217</a> - <a href="#">C12Y 201/0122</a> take precedence)	201/01076	. . Quercetin 3-O-methyltransferase (2.1.1.76)
201/01037	. . DNA (cytosine-5-)-methyltransferase (2.1.1.37)	201/01077	. . Protein-L-isoaspartate(D-aspartate) O-methyltransferase (2.1.1.77)
201/01038	. . O-Demethylpuromycin O-methyltransferase (2.1.1.38)	201/01078	. . Isoorientin 3'-O-methyltransferase (2.1.1.78)
201/01039	. . Inositol 3-methyltransferase (2.1.1.39)	201/01079	. . Cyclopropane-fatty-acyl-phospholipid synthase (2.1.1.79)
201/0104	. . Inositol 1-methyltransferase (2.1.1.40)	201/0108	. . Protein-glutamate O-methyltransferase (2.1.1.80)
201/01041	. . Sterol 24-C-methyltransferase (2.1.1.41)	201/01082	. . 3-Methylquercetin 7-O-methyltransferase (2.1.1.82)
201/01042	. . Flavone 3'-O-methyltransferase (2.1.1.42)	201/01083	. . 3,7-Dimethylquercetin 4'-O-methyltransferase (2.1.1.83)
201/01043	. . Histone-lysine N-methyltransferase (2.1.1.43)	201/01084	. . Methylquercetagenin 6-O-methyltransferase (2.1.1.84)
201/01044	. . Dimethylhistidine N-methyltransferase (2.1.1.44)	201/01085	. . Protein-histidine N-methyltransferase (2.1.1.85)
201/01045	. . Thymidylate synthase (2.1.1.45)	201/01086	. . Tetrahydromethanopterin S-methyltransferase (2.1.1.86)
201/01046	. . Isoflavone 4'-O-methyltransferase (2.1.1.46)	201/01087	. . Pyridine N-methyltransferase (2.1.1.87)
201/01047	. . Indolepyruvate C-methyltransferase (2.1.1.47)	201/01088	. . 8-Hydroxyquercetin 8-O-methyltransferase (2.1.1.88)
201/01048	. . rRNA (adenine-N6-)-methyltransferase (2.1.1.48) ( <a href="#">C12Y 201/01181</a> - <a href="#">C12Y 201/01184</a> take precedence)	201/01089	. . Tetrahydrocolumbamine 2-O-methyltransferase (2.1.1.89)
201/01049	. . Amine N-methyltransferase (2.1.1.49)	201/0109	. . Methanol—corrinoid protein Co-methyltransferase (2.1.1.90)
201/0105	. . Loganate O-methyltransferase (2.1.1.50)	201/01091	. . Isobutyraldoxime O-methyltransferase (2.1.1.91)
201/01051	. . rRNA (guanine-N1-)-methyltransferase (2.1.1.51) ( <a href="#">C12Y 201/01187</a> , <a href="#">C12Y 201/01188</a> take precedence)	201/01094	. . Tabersonine 16-O-methyltransferase (2.1.1.94)
201/01052	. . rRNA (guanine-N2-)-methyltransferase (2.1.1.52) ( <a href="#">C12Y 201/01171</a> - <a href="#">C12Y 201/01174</a> take precedence)	201/01095	. . Tocopherol O-methyltransferase (2.1.1.95)
201/01053	. . Putrescine N-methyltransferase (2.1.1.53)	201/01096	. . Thioether S-methyltransferase (2.1.1.96)
201/01054	. . Deoxycytidylate C-methyltransferase (2.1.1.54)	201/01097	. . 3-Hydroxyanthranilate 4-C-methyltransferase (2.1.1.97)
201/01055	. . tRNA (adenine-N6-)-methyltransferase (2.1.1.55)	201/01098	. . Diphthine synthase (2.1.1.98)
201/01056	. . mRNA (guanine-N7-)-methyltransferase (2.1.1.56)	201/01099	. . 3-Hydroxy-16-methoxy-2,3-dihydrotabersonine N-methyltransferase (2.1.1.99)
201/01057	. . mRNA (nucleoside-2'-O-)-methyltransferase (2.1.1.57)	201/011	. . Protein-S-isoprenylcysteine O-methyltransferase (2.1.1.100)
201/01059	. . [Cytochrome c]-lysine N-methyltransferase (2.1.1.59)	201/01101	. . Macrocin O-methyltransferase (2.1.1.101)
201/0106	. . Calmodulin-lysine N-methyltransferase (2.1.1.60)	201/01102	. . Demethylmacrocin O-methyltransferase (2.1.1.102)
201/01061	. . tRNA (5-methylaminomethyl-2-thiouridylate)-methyltransferase (2.1.1.61)	201/01103	. . Phosphoethanolamine N-methyltransferase (2.1.1.103)
		201/01104	. . Caffeoyl-CoA O-methyltransferase (2.1.1.104)

201/01105	. . N-Benzoyl-4-hydroxyanthranilate 4-O-methyltransferase (2.1.1.105)	201/01147	. . Corydaline synthase (2.1.1.147)
201/01106	. . Tryptophan 2-C-methyltransferase (2.1.1.106)	201/01148	. . Thymidylate synthase (FAD) (2.1.1.148)
201/01107	. . Uroporphyrinogen-III C-methyltransferase (2.1.1.107)	201/01149	. . Myricetin O-methyltransferase (2.1.1.149)
201/01108	. . 6-Hydroxymellein O-methyltransferase (2.1.1.108)	201/0115	. . Isoflavone 7-O-methyltransferase (2.1.1.150)
201/01109	. . Demethylsterigmatocystin 6-O-methyltransferase (2.1.1.109)	201/01151	. . Cobalt-factor II C20-methyltransferase (2.1.1.151)
201/0111	. . Sterigmatocystin 8-O-methyltransferase (2.1.1.110)	201/01152	. . Precorrin-6A synthase (deacetylating) (2.1.1.152)
201/01111	. . Anthranilate N-methyltransferase (2.1.1.111)	201/01153	. . Vitexin 2''-O-rhamnoside 7-O-methyltransferase (2.1.1.153)
201/01112	. . Glucuronoxylan 4-O-methyltransferase (2.1.1.112)	201/01154	. . Isoliquiritigenin 2'-O-methyltransferase (2.1.1.154)
201/01113	. . Site-specific DNA-methyltransferase (cytosine-N4-specific) (2.1.1.113)	201/01155	. . Kaempferol 4'-O-methyltransferase (2.1.1.155)
201/01114	. . Polyprenyldihydroxybenzoate methyltransferase (2.1.1.114)	201/01156	. . Glycine/sarcosine N-methyltransferase (2.1.1.156)
201/01115	. . (RS)-1-Benzyl-1,2,3,4-tetrahydroisoquinoline N-methyltransferase (2.1.1.115)	201/01157	. . Sarcosine/dimethylglycine N-methyltransferase (2.1.1.157)
201/01116	. . 3'-Hydroxy-N-methyl-(S)-coclaurine 4'-O-methyltransferase (2.1.1.116)	201/01158	. . 7-Methylxanthosine synthase (2.1.1.158)
201/01117	. . (S)-Scoulerine 9-O-methyltransferase (2.1.1.117)	201/01159	. . Theobromine synthase (2.1.1.159)
201/01118	. . Columbamine O-methyltransferase (2.1.1.118)	201/0116	. . Caffeine synthase (2.1.1.160)
201/01119	. . 10-Hydroxydihydrosanguinarine 10-O-methyltransferase (2.1.1.119)	201/01161	. . Dimethylglycine N-methyltransferase (2.1.1.161)
201/0112	. . 12-Hydroxydihydrochelirubine 12-O-methyltransferase (2.1.1.120)	201/01162	. . Glycine/sarcosine/dimethylglycine N-methyltransferase (2.1.1.162)
201/01121	. . 6-O-Methylnorlaudanoline 5'-O-methyltransferase (2.1.1.121)	201/01163	. . Demethylmenaquinone methyltransferase (2.1.1.163)
201/01122	. . (S)-Tetrahydroprotoberberine N-methyltransferase (2.1.1.122)	201/01164	. . Demethylrebeccamycin-D-glucose O-methyltransferase (2.1.1.164)
201/01123	. . [Cytochrome c]-methionine S-methyltransferase (2.1.1.123)	201/01165	. . Methyl halide transferase (2.1.1.165)
201/01124	. . [Cytochrome c]-arginine N-methyltransferase (2.1.1.124)	201/01166	. . 23S rRNA (uridine2552-2'-O-)-methyltransferase (2.1.1.166)
201/01125	. . Histone-arginine N-methyltransferase (2.1.1.125)	201/01167	. . 27S pre-rRNA (guanosine2922-2'-O-)-methyltransferase (2.1.1.167)
201/01126	. . [Myelin basic protein]-arginine N-methyltransferase (2.1.1.126)	201/01168	. . 21S rRNA (uridine2791-2'-O-)-methyltransferase (2.1.1.168)
201/01127	. . [Ribulose-bisphosphate carboxylase]-lysine N-methyltransferase (2.1.1.127)	201/01169	. . Tricetin 3',4',5'-O-trimethyltransferase (2.1.1.169)
201/01128	. . (RS)-Norcoclaurine 6-O-methyltransferase (2.1.1.128)	201/0117	. . 16S rRNA (guanine527-N7)-methyltransferase (2.1.1.170)
201/01129	. . Inositol 4-methyltransferase (2.1.1.129)	201/01171	. . 16S rRNA (guanine966-N2)-methyltransferase (2.1.1.171)
201/0113	. . Precorrin-2 C20-methyltransferase (2.1.1.130)	201/01172	. . 16S rRNA (guanine1207-N2)-methyltransferase (2.1.1.172)
201/01131	. . Precorrin-3B C17-methyltransferase (2.1.1.131)	201/01173	. . 23S rRNA (guanine2445-N2)-methyltransferase (2.1.1.173)
201/01132	. . Precorrin-6Y C5,15-methyltransferase (decarboxylating) (2.1.1.132)	201/01174	. . 23S rRNA (guanine1835-N2)-methyltransferase (2.1.1.174)
201/01133	. . Precorrin-4 C11-methyltransferase (2.1.1.133)	201/01175	. . Tricin synthase (2.1.1.175)
201/01136	. . Chlorophenol O-methyltransferase (2.1.1.136)	201/01176	. . 16S rRNA (cytosine967-C5)-methyltransferase (2.1.1.176)
201/01137	. . Arsenite methyltransferase (2.1.1.137)	201/01177	. . 23S rRNA (pseudouridine1915-N3)-methyltransferase (2.1.1.177)
201/01139	. . 3'-Demethylstaurosporine O-methyltransferase (2.1.1.139)	201/01178	. . 16S rRNA (cytosine1407-C5)-methyltransferase (2.1.1.178)
201/0114	. . (S)-Coclaurine-N-methyltransferase (2.1.1.140)	201/01179	. . 16S rRNA (guanine1405-N7)-methyltransferase (2.1.1.179)
201/01141	. . Jasmonate O-methyltransferase (2.1.1.141)	201/0118	. . 16S rRNA (adenine1408-N1)-methyltransferase (2.1.1.180)
201/01142	. . Cycloartenol 24-C-methyltransferase (2.1.1.142), i.e. sterol C24-methyltransferase	201/01181	. . 23S rRNA (adenine1618-N6)-methyltransferase (2.1.1.181)
201/01143	. . 24-Methylenesterol C-methyltransferase (2.1.1.143), i.e. DELTA24-sterol methyltransferase	201/01182	. . 16S rRNA (adenine1518-N6/adenine1519-N6)-dimethyltransferase (2.1.1.182)
201/01144	. . Trans-aconitate 2-methyltransferase (2.1.1.144)	201/01183	. . 18S rRNA (adenine1779-N6/adenine1780-N6)-dimethyltransferase (2.1.1.183)
201/01145	. . Trans-aconitate 3-methyltransferase (2.1.1.145)	201/01184	. . 23S rRNA (adenine2085-N6)-dimethyltransferase (2.1.1.184)
201/01146	. . (Iso)eugenol O-methyltransferase (2.1.1.146)		



201/01185	. . 23S rRNA (guanine2251-2'-O)-methyltransferase (2.1.1.185)	201/01216	. . tRNA (guanine26-N2)-dimethyltransferase (2.1.1.216)
201/01186	. . 23S rRNA (cytidine2498-2'-O)-methyltransferase (2.1.1.186)	201/01217	. . tRNA (adenine22-N1)-methyltransferase (2.1.1.217)
201/01187	. . 23S rRNA (guanine745-N1)-methyltransferase (2.1.1.187)	201/01218	. . tRNA (adenine9-N1)-methyltransferase (2.1.1.218)
201/01188	. . 23S rRNA (guanine748-N1)-methyltransferase (2.1.1.188)	201/01219	. . tRNA (adenine57-N1/adenine58-N1)-methyltransferase (2.1.1.219)
201/01189	. . 23S rRNA (uracil747-C5)-methyltransferase (2.1.1.189)	201/0122	. . tRNA (adenine58-N1)-methyltransferase (2.1.1.220)
201/0119	. . 23S rRNA (uracil1939-C5)-methyltransferase (2.1.1.190)	201/01221	. . tRNA (guanine9-N1)-methyltransferase (2.1.1.221)
201/01191	. . 23S rRNA (cytosine1962-C5)-methyltransferase (2.1.1.191)	201/01222	. . 2-Polyprenyl-6-hydroxyphenyl methylase (2.1.1.222)
201/01192	. . 23S rRNA (adenine2503-C2)-methyltransferase (2.1.1.192)	201/01223	. . tRNA1(Val) (adenine37-N6)-methyltransferase (2.1.1.223)
201/01193	. . 16S rRNA (uracil1498-N3)-methyltransferase (2.1.1.193)	201/01224	. . 23S rRNA (adenine2503-C8)-methyltransferase (2.1.1.224)
201/01194	. . 23S rRNA (adenine2503-C2,C8)-dimethyltransferase (2.1.1.194) <a href="#">(C12Y 201/01192, C12Y 201/01224 take precedence)</a>	201/01225	. . tRNA:m4X modification enzyme (2.1.1.225)
201/01195	. . Cobalt-precorrin-5B (C1)-methyltransferase (2.1.1.195)	201/01226	. . 23S rRNA (cytidine1920-2'-O)-methyltransferase (2.1.1.226)
201/01196	. . Cobalt-precorrin-7 (C15)-methyltransferase (decarboxylating) (2.1.1.196)	201/01227	. . 16S rRNA (cytidine1409-2'-O)-methyltransferase (2.1.1.227)
201/01197	. . Malonyl-CoA O-methyltransferase (2.1.1.197)	201/01228	. . tRNA (guanine37-N1)-methyltransferase (2.1.1.228)
201/01198	. . 16S rRNA (cytidine1402-2'-O)-methyltransferase (2.1.1.198)	201/01229	. . tRNA (carboxymethyluridine34-5-O)-methyltransferase (2.1.1.229)
201/01199	. . 16S rRNA (cytosine1402-N4)-methyltransferase (2.1.1.199)	201/0123	. . 23S rRNA (adenosine1067-2'-O)-methyltransferase (2.1.1.230)
201/012	. . tRNA (cytidine32/uridine32-2'-O)-methyltransferase (2.1.1.200)	201/01231	. . Flavonoid 4'-O-methyltransferase (2.1.1.231)
201/01201	. . 2-Methoxy-6-polyprenyl-1,4-benzoquinol methylase (2.1.1.201)	201/01232	. . Naringenin 7-O-methyltransferase (2.1.1.232)
201/01202	. . Multisite-specific tRNA:(cytosine-C5)-methyltransferase (2.1.1.202)	201/01233	. . [Phosphatase 2A protein]-leucine-carboxy methyltransferase (2.1.1.233)
201/01203	. . tRNA (cytosine34-C5)-methyltransferase (2.1.1.203)	201/01234	. . dTDP-3-amino-3,4,6-trideoxy-alpha-D-glucopyranose N,N-dimethyltransferase (2.1.1.234)
201/01204	. . tRNA (cytosine38-C5)-methyltransferase (2.1.1.204)	201/01235	. . dTDP-3-amino-3,6-dideoxy-alpha-D-glucopyranose N,N-dimethyltransferase (2.1.1.235)
201/01205	. . tRNA (cytidine32/guanosine34-2'-O)-methyltransferase (2.1.1.205)	201/01236	. . dTDP-3-amino-3,6-dideoxy-alpha-D-galactopyranose N,N-dimethyltransferase (2.1.1.236)
201/01206	. . tRNA (cytidine56-2'-O)-methyltransferase (2.1.1.206)	201/01237	. . Mycinamicin III 3"-O-methyltransferase (2.1.1.237)
201/01207	. . tRNA (cytidine34-2'-O)-methyltransferase (2.1.1.207)	201/01238	. . Mycinamicin VI 2"-O-methyltransferase (2.1.1.238)
201/01208	. . 23S rRNA (uridine2479-2'-O)-methyltransferase (2.1.1.208)	201/01239	. . L-Olivosyl-oleandolide 3-O-methyltransferase (2.1.1.239)
201/01209	. . 23S rRNA (guanine2535-N1)-methyltransferase (2.1.1.209)	201/0124	. . Trans-resveratrol di-O-methyltransferase (2.1.1.240)
201/0121	. . Demethylspheroidene O-methyltransferase (2.1.1.210)	201/01241	. . 2,4,7-Trihydroxy-1,4-benzoxazin-3-one-glucoside 7-O-methyltransferase (2.1.1.241)
201/01211	. . tRNA(Ser) (uridine44-2'-O)-methyltransferase (2.1.1.211)	201/01242	. . 16S rRNA (guanine1516-N2)-methyltransferase (2.1.1.242)
201/01212	. . 2,7,4'-Trihydroxyisoflavanone 4'-O-methyltransferase (2.1.1.212)	201/01243	. . 2-Ketoarginine methyltransferase (2.1.1.243)
201/01213	. . tRNA (guanine10-N2)-dimethyltransferase (2.1.1.213)	201/01244	. . Protein N-terminal methyltransferase (2.1.1.244)
201/01214	. . tRNA (guanine10-N2)-methyltransferase (2.1.1.214)	201/01245	. . 5-Methyltetrahydrosarcinapterin:corrinoid/iron-sulfur protein Co-methyltransferase (2.1.1.245)
201/01215	. . tRNA (guanine26-N2/guanine27-N2)-dimethyltransferase (2.1.1.215)	201/01246	. . [Methyl-Co(III) methanol-specific corrinoid protein]:coenzyme M methyltransferase (2.1.1.246)
		201/01247	. . [Methyl-Co(III) methylamine-specific corrinoid protein]:coenzyme M methyltransferase (2.1.1.247)

- 201/01248 . . Methylamine—corrinoid protein Co-methyltransferase (2.1.1.248)
- 201/01249 . . Dimethylamine—corrinoid protein Co-methyltransferase (2.1.1.249)
- 201/0125 . . Trimethylamine—corrinoid protein Co-methyltransferase (2.1.1.250)
- 201/01251 . . Methylated-thiol—coenzyme M methyltransferase (2.1.1.251)
- 201/01252 . . Tetramethylammonium—corrinoid protein Co-methyltransferase (2.1.1.252)
- 201/01253 . . [Methyl-Co(III) tetramethylammonium-specific corrinoid protein]:coenzyme M methyltransferase (2.1.1.253)
- 201/01254 . . Erythromycin 3"-O-methyltransferase (2.1.1.254)
- 201/01255 . . Geranyl diphosphate 2-C-methyltransferase (2.1.1.255)
- 201/01256 . . tRNA (guanine6-N2)-methyltransferase (2.1.1.256)
- 201/01257 . . tRNA (pseudouridine54-N1)-methyltransferase (2.1.1.257)
- 201/01258 . . 5-Methyltetrahydrofolate:corrinoid/iron-sulfur protein Co-methyltransferase (2.1.1.258)
- 201/01259 . . [Fructose-bisphosphate aldolase]-lysine N-methyltransferase (2.1.1.259)
- 201/0126 . . rRNA small subunit pseudouridine methyltransferase Nep1 (2.1.1.260)
- 201/01261 . . 4-Dimethylallyltryptophan N-methyltransferase (2.1.1.261)
- 201/01262 . . Squalene methyltransferase (2.1.1.262)
- 201/01263 . . Botryococcene C-methyltransferase (2.1.1.263)
- 201/01264 . . 23S rRNA (guanine2069-N7)-methyltransferase (2.1.1.264)
- 201/01265 . . Tellurite methyltransferase (2.1.1.265)
- 201/02 . . Hydroxymethyl-, formyl- and related transferases (2.1.2)
- 201/02001 . . Glycine hydroxymethyltransferase (2.1.2.1)
- 201/02002 . . Phosphoribosylglycinamide formyltransferase (2.1.2.2)
- 201/02003 . . Phosphoribosylaminoimidazolecarboxamide formyltransferase (2.1.2.3), i.e. AICAR formyltransferase
- 201/02004 . . Glycine formimidoyltransferase (2.1.2.4)
- 201/02005 . . Glutamate formimidoyltransferase (2.1.2.5)
- 201/02007 . . D-Alanine 2-hydroxymethyltransferase (2.1.2.7)
- 201/02008 . . Deoxycytidylate 5-hydroxymethyltransferase (2.1.2.8)
- 201/02009 . . Methionyl-tRNA formyltransferase (2.1.2.9)
- 201/0201 . . Aminomethyltransferase (2.1.2.10)
- 201/02011 . . 3-Methyl-2-oxobutanoate hydroxymethyltransferase (2.1.2.11), i.e. ketopantoate hydroxymethyltransferase
- 201/02013 . . UDP-4-amino-4-deoxy-L-arabinose formyltransferase (2.1.2.13)
- 201/03 . . Carboxy- and carbamoyltransferases (2.1.3)
- 201/03001 . . Methylmalonyl-CoA carboxyltransferase (2.1.3.1)
- 201/03002 . . Aspartate carbamoyltransferase (2.1.3.2)
- 201/03003 . . Ornithine carbamoyltransferase (2.1.3.3)
- 201/03005 . . Oxamate carbamoyltransferase (2.1.3.5)
- 201/03006 . . Putrescine carbamoyltransferase (2.1.3.6)
- 201/03007 . . 3-Hydroxymethylcephem carbamoyltransferase (2.1.3.7)
- 201/03008 . . Lysine carbamoyltransferase (2.1.3.8)
- 201/03009 . . N-Acetylornithine carbamoyltransferase (2.1.3.9)
- 201/0301 . . Malonyl-S-ACP:biotin-protein carboxyltransferase (2.1.3.10)
- 201/03011 . . N-Succinylornithine carbamoyltransferase (2.1.3.11)
- 201/04 . . Amidinotransferases (2.1.4)
- 201/04001 . . Glycine amidinotransferase (2.1.4.1)
- 201/04002 . . Scyllo-inosamine-4-phosphate amidinotransferase (2.1.4.2)
- 202/00      Transferases transferring aldehyde or ketonic groups (2.2)**
- 202/01 . . Transketolases and transaldolases (2.2.1)
- 202/01001 . . Transketolase (2.2.1.1)
- 202/01002 . . Transaldolase (2.2.1.2)
- 202/01003 . . Formaldehyde transketolase (2.2.1.3)
- 202/01004 . . Acetoin--ribose-5-phosphate transaldolase (2.2.1.4)
- 202/01005 . . 2-Hydroxy-3-oxoadipate synthase (2.2.1.5)
- 202/01006 . . Acetolactate synthase (2.2.1.6)
- 202/01007 . . 1-Deoxy-D-xylulose-5-phosphate synthase (2.2.1.7)
- 202/01008 . . Fluorothreonine transaldolase (2.2.1.8)
- 202/01009 . . 2-Succinyl-5-enolpyruvyl-6-hydroxy-3-cyclohexene-1-carboxylic-acid synthase (2.2.1.9)
- 202/0101 . . 2-Amino-3,7-dideoxy-D-threo-hept-6-ulosonate synthase (2.2.1.10)
- 202/01011 . . 6-Deoxy-5-ketofructose 1-phosphate synthase (2.2.1.11)
- 203/00      Acyltransferases (2.3)**
- 203/01 . . transferring groups other than amino-acyl groups (2.3.1)
- 203/01001 . . Amino-acid N-acetyltransferase (2.3.1.1)
- 203/01002 . . Imidazole N-acetyltransferase (2.3.1.2)
- 203/01003 . . Glucosamine N-acetyltransferase (2.3.1.3)
- 203/01004 . . Glucosamine-phosphate N-acetyltransferase (2.3.1.4)
- 203/01005 . . Arylamine N-acetyltransferase (2.3.1.5)
- 203/01006 . . Choline O-acetyltransferase (2.3.1.6)
- 203/01007 . . Carnitine O-acetyltransferase (2.3.1.7)
- 203/01008 . . Phosphate acetyltransferase (2.3.1.8)
- 203/01009 . . Acetyl-CoA C-acetyltransferase (2.3.1.9)
- 203/0101 . . Hydrogen-sulfide S-acetyltransferase (2.3.1.10)
- 203/01011 . . Thioethanolamine S-acetyltransferase (2.3.1.11)
- 203/01012 . . Dihydrolipoyllysine-residue acetyltransferase (2.3.1.12)
- 203/01013 . . Glycine N-acyltransferase (2.3.1.13)
- 203/01014 . . Glutamine N-phenylacetyltransferase (2.3.1.14)
- 203/01015 . . Glycerol-3-phosphate O-acyltransferase (2.3.1.15)
- 203/01016 . . Acetyl-CoA C-acyltransferase (2.3.1.16)
- 203/01017 . . Aspartate N-acetyltransferase (2.3.1.17)
- 203/01018 . . Galactoside O-acetyltransferase (2.3.1.18)
- 203/01019 . . Phosphate butyryltransferase (2.3.1.19)
- 203/0102 . . Diacylglycerol O-acyltransferase (2.3.1.20)
- 203/01021 . . Carnitine O-palmitoyltransferase (2.3.1.21)
- 203/01022 . . 2-Acylglycerol O-acyltransferase (2.3.1.22)
- 203/01023 . . 1-Acylglycerophosphocholine O-acyltransferase (2.3.1.23), i.e. lysophosphatidylcholine acyltransferase or LPCAT
- 203/01024 . . Sphingosine N-acyltransferase (2.3.1.24)
- 203/01025 . . Plasmalogen synthase (2.3.1.25)
- 203/01026 . . Sterol O-acyltransferase (2.3.1.26)

203/01027	. . Cortisol O-acetyltransferase (2.3.1.27)	203/01072	. . Indoleacetylglucose--inositol O-acyltransferase (2.3.1.72)
203/01028	. . Chloramphenicol O-acetyltransferase (2.3.1.28)	203/01073	. . Diacylglycerol-sterol O-acyltransferase (2.3.1.73)
203/01029	. . Glycine C-acetyltransferase (2.3.1.29)	203/01074	. . Naringenin-chalcone synthase (2.3.1.74), i.e. chalcone synthase
203/0103	. . Serine O-acetyltransferase (2.3.1.30)	203/01075	. . Long-chain-alcohol O-fatty-acyltransferase (2.3.1.75)
203/01031	. . Homoserine O-acetyltransferase (2.3.1.31)	203/01076	. . Retinol O-fatty-acyltransferase (2.3.1.76)
203/01032	. . Lysine N-acetyltransferase (2.3.1.32)	203/01077	. . Triacylglycerol--sterol O-acyltransferase (2.3.1.77)
203/01033	. . Histidine N-acetyltransferase (2.3.1.33)	203/01078	. . Heparan-alpha-glucosaminide N-acetyltransferase (2.3.1.78)
203/01034	. . D-Tryptophan N-acetyltransferase (2.3.1.34)	203/01079	. . Maltose O-acetyltransferase (2.3.1.79)
203/01035	. . Glutamate N-acetyltransferase (2.3.1.35)	203/0108	. . Cysteine-S-conjugate N-acetyltransferase (2.3.1.80)
203/01036	. . D-Amino-acid N-acetyltransferase (2.3.1.36)	203/01081	. . Aminoglycoside N3'-acetyltransferase (2.3.1.81)
203/01037	. . 5-Aminolevulinatase synthase (2.3.1.37)	203/01082	. . Aminoglycoside N6'-acetyltransferase (2.3.1.82)
203/01038	. . [Acyl-carrier-protein] S-acetyltransferase (2.3.1.38)	203/01083	. . Phosphatidylcholine--dolichol O-acyltransferase (2.3.1.83)
203/01039	. . [Acyl-carrier-protein] S-malonyltransferase (2.3.1.39)	203/01084	. . Alcohol O-acetyltransferase (2.3.1.84)
203/0104	. . Acyl-[acyl-carrier-protein]-phospholipid O-acyltransferase (2.3.1.40)	203/01085	. . Fatty-acid synthase (2.3.1.85)
203/01041	. . Beta-ketoacyl-acyl-carrier-protein synthase I (2.3.1.41)	203/01086	. . Fatty-acyl-CoA synthase (2.3.1.86)
203/01042	. . Glycerone-phosphate O-acyltransferase (2.3.1.42)	203/01087	. . Aralkylamine N-acetyltransferase (2.3.1.87)
203/01043	. . Phosphatidylcholine-sterol O-acyltransferase (2.3.1.43), i.e. lecithin-cholesterol acyltransferase or LCAT	203/01088	. . Peptide alpha-N-acetyltransferase (2.3.1.88)
203/01044	. . Acetyl-CoA:N-acetylneuraminate 4-O-acetyltransferase (2.3.1.44)	203/01089	. . Tetrahydrodipicolinate N-acetyltransferase (2.3.1.89)
203/01045	. . N-Acetylneuraminate 7-O (or 9-O)-acetyltransferase (2.3.1.45)	203/0109	. . Beta-glucogallin O-galloyltransferase (2.3.1.90)
203/01046	. . Homoserine O-succinyltransferase (2.3.1.46)	203/01091	. . Sinapoylglucose--choline O-sinapoyltransferase (2.3.1.91)
203/01047	. . 8-Amino-7-oxononanoate synthase (2.3.1.47)	203/01092	. . Sinapoylglucose--malate O-sinapoyltransferase (2.3.1.92)
203/01048	. . Histone acetyltransferase (2.3.1.48)	203/01093	. . 13-Hydroxylupanine O-tigloyltransferase (2.3.1.93)
203/01049	. . Deacetyl-[citrate-(pro-3S)-lyase] S-acetyltransferase (2.3.1.49)	203/01094	. . 6-Deoxyerythronolide-B synthase (2.3.1.94)
203/0105	. . Serine C-palmitoyltransferase (2.3.1.50)	203/01095	. . Trihydroxystilbene synthase (2.3.1.95)
203/01051	. . 1-Acylglycerol-3-phosphate O-acyltransferase (2.3.1.51)	203/01096	. . Glycoprotein N-palmitoyltransferase (2.3.1.96)
203/01052	. . 2-Acylglycerol-3-phosphate O-acyltransferase (2.3.1.52)	203/01097	. . Glycylpeptide N-tetradecanoyltransferase (2.3.1.97)
203/01053	. . Phenylalanine N-acetyltransferase (2.3.1.53)	203/01098	. . Chlorogenate--glucarate O-hydroxycinnamoyltransferase (2.3.1.98)
203/01054	. . Formate C-acetyltransferase (2.3.1.54), i.e. pyruvate formate-lyase or PFL	203/01099	. . Quinate O-hydroxycinnamoyltransferase (2.3.1.99)
203/01056	. . Aromatic-hydroxylamine O-acetyltransferase (2.3.1.56)	203/011	. . [Myelin-proteolipid] O-palmitoyltransferase (2.3.1.100)
203/01057	. . Diamine N-acetyltransferase (2.3.1.57)	203/01101	. . Formylmethanofuran--tetrahydromethanopterin N-formyltransferase (2.3.1.101)
203/01058	. . 2,3-Diaminopropionate N-oxalyltransferase (2.3.1.58)	203/01102	. . N6-Hydroxyllysine O-acetyltransferase (2.3.1.102)
203/01059	. . Gentamicin 2'-N-acetyltransferase (2.3.1.59)	203/01103	. . Sinapoylglucose--sinapoylglucose O-sinapoyltransferase (2.3.1.103)
203/0106	. . Gentamicin 3'-N-acetyltransferase (2.3.1.60)	203/01104	. . 1-Alkenylglycerophosphocholine O-acyltransferase (2.3.1.104)
203/01061	. . Dihydrolypoyllysine-residue succinyltransferase (2.3.1.61)	203/01105	. . Alkylglycerophosphate 2-O-acetyltransferase (2.3.1.105)
203/01062	. . 2-Acylglycerophosphocholine O-acyltransferase (2.3.1.62)	203/01106	. . Tartronate O-hydroxycinnamoyltransferase (2.3.1.106)
203/01063	. . 1-Alkylglycerophosphocholine O-acyltransferase (2.3.1.63)	203/01107	. . Deacetylvinidoline O-acetyltransferase (2.3.1.107)
203/01064	. . Agmatine N4-coumaroyltransferase (2.3.1.64)	203/01108	. . Alpha-tubulin N-acetyltransferase (2.3.1.108)
203/01065	. . Bile acid-CoA:amino acid N-acyltransferase (2.3.1.65)	203/01109	. . Arginine N-succinyltransferase (2.3.1.109)
203/01066	. . Leucine N-acetyltransferase (2.3.1.66)	203/0111	. . Tyramine N-feruloyltransferase (2.3.1.110)
203/01067	. . 1-Alkylglycerophosphocholine O-acetyltransferase (2.3.1.67)	203/01111	. . Mycocerosate synthase (2.3.1.111)
203/01068	. . Glutamine N-acyltransferase (2.3.1.68)	203/01112	. . D-Tryptophan N-malonyltransferase (2.3.1.112)
203/01069	. . Monoterpenol O-acetyltransferase (2.3.1.69)	203/01113	. . Anthranilate N-malonyltransferase (2.3.1.113)
203/01071	. . Glycine N-benzoyltransferase (2.3.1.71)		

203/01114	. . 3,4-Dichloroaniline N-malonyltransferase (2.3.1.114)	203/01156	. . Phloroisovalerophenone synthase (2.3.1.156)
203/01115	. . Isoflavone-7-O-beta-glucoside 6"-O-malonyltransferase (2.3.1.115)	203/01157	. . Glucosamine-1-phosphate N-acetyltransferase (2.3.1.157)
203/01116	. . Flavonol-3-O-beta-glucoside O-malonyltransferase (2.3.1.116)	203/01158	. . Phospholipid:diacylglycerol acyltransferase (2.3.1.158)
203/01117	. . 2,3,4,5-Tetrahydropyridine-2,6-dicarboxylate N-succinyltransferase (2.3.1.117)	203/01159	. . Acridone synthase (2.3.1.159)
203/01118	. . N-Hydroxyarylamine O-acetyltransferase (2.3.1.118)	203/0116	. . Vinorine synthase (2.3.1.160)
203/01119	. . Icosanoyl-CoA synthase (2.3.1.119)	203/01161	. . Lovastatin nonaketide synthase (2.3.1.161)
203/01121	. . 1-Alkenylglycerophosphoethanolamine O-acyltransferase (2.3.1.121)	203/01162	. . Taxadien-5-alpha-ol O-acetyltransferase (2.3.1.162)
203/01122	. . Trehalose O-mycolyltransferase (2.3.1.122)	203/01163	. . 10-Hydroxytaxane O-acetyltransferase (2.3.1.163)
203/01123	. . Dolichol O-acyltransferase (2.3.1.123)	203/01164	. . Isopenicillin-N N-acyltransferase (2.3.1.164)
203/01125	. . 1-Alkyl-2-acetyl glycerol O-acyltransferase (2.3.1.125)	203/01165	. . 6-Methylsalicylic acid synthase (2.3.1.165)
203/01126	. . Isocitrate O-dihydroxycinnamoyltransferase (2.3.1.126)	203/01166	. . 2-Alpha-hydroxytaxane 2-O-benzoyltransferase (2.3.1.166)
203/01127	. . Ornithine N-benzoyltransferase (2.3.1.127)	203/01167	. . 10-Deacetyl baccatin III 10-O-acetyltransferase (2.3.1.167)
203/01128	. . Ribosomal-protein-alanine N-acetyltransferase (2.3.1.128)	203/01168	. . Dihydrolipoyllysine-residue (2-methylpropanoyl)transferase (2.3.1.168)
203/01129	. . Acyl-[acyl-carrier-protein]-UDP-N-acetylglucosamine O-acyltransferase (2.3.1.129)	203/01169	. . CO-Methylating acetyl-CoA synthase (2.3.1.169)
203/0113	. . Galactarate O-hydroxycinnamoyltransferase (2.3.1.130)	203/0117	. . 6'-Deoxychalcone synthase (2.3.1.170)
203/01131	. . Glucarate O-hydroxycinnamoyltransferase (2.3.1.131)	203/01171	. . Anthocyanin 6"-O-malonyltransferase (2.3.1.171)
203/01132	. . Glucarolactone O-hydroxycinnamoyltransferase (2.3.1.132)	203/01172	. . Anthocyanin 5-O-glucoside 6""-O-malonyltransferase (2.3.1.172)
203/01133	. . Shikimate O-hydroxycinnamoyltransferase (2.3.1.133)	203/01173	. . Flavonol-3-O-triglucoside O-coumaroyltransferase (2.3.1.173)
203/01134	. . Galactolipid O-acyltransferase (2.3.1.134)	203/01174	. . 3-Oxoadipyl-CoA thiolase (2.3.1.174)
203/01135	. . Phosphatidylcholine--retinol O-acyltransferase (2.3.1.135)	203/01175	. . Deacetylcephalosporin-C acetyltransferase (2.3.1.175)
203/01136	. . Polysialic-acid O-acetyltransferase (2.3.1.136)	203/01176	. . Propanoyl-CoA C-acyltransferase (2.3.1.176)
203/01137	. . Carnitine O-octanoyltransferase (2.3.1.137)	203/01177	. . 3,5-Dihydroxybiphenyl synthase (2.3.1.177)
203/01138	. . Putrescine N-hydroxycinnamoyltransferase (2.3.1.138)	203/01178	. . Diaminobutyrate acetyltransferase (2.3.1.178)
203/01139	. . Ecdysone O-acyltransferase (2.3.1.139)	203/01179	. . Beta-ketoacyl-acyl-carrier-protein synthase II (2.3.1.179)
203/0114	. . Rosmarinate synthase (2.3.1.140)	203/0118	. . Beta-ketoacyl-acyl-carrier-protein synthase III (2.3.1.180)
203/01141	. . Galactosylacylglycerol O-acyltransferase (2.3.1.141)	203/01181	. . Lipoyl(octanoyl) transferase (2.3.1.181)
203/01142	. . Glycoprotein O-fatty-acyltransferase (2.3.1.142)	203/01182	. . (R)-Citramalate synthase (2.3.1.182)
203/01143	. . Beta-glucogallin--tetrakisgalloylglucose O-galloyltransferase (2.3.1.143)	203/01183	. . Phosphinothricin acetyltransferase (2.3.1.183)
203/01144	. . Anthranilate N-benzoyltransferase (2.3.1.144)	203/01184	. . Acyl-homoserine-lactone synthase (2.3.1.184)
203/01145	. . Piperidine N-piperoyltransferase (2.3.1.145)	203/01185	. . Tropine acyltransferase (2.3.1.185)
203/01146	. . Pinosylvin synthase (2.3.1.146)	203/01186	. . Pseudotropine acyltransferase (2.3.1.186)
203/01147	. . Glycerophospholipid arachidonoyl-transferase (CoA-independent) (2.3.1.147)	203/01187	. . Acetyl-S-ACP:malonate ACP transferase (2.3.1.187)
203/01148	. . Glycerophospholipid acyltransferase (CoA-dependent) (2.3.1.148)	203/01188	. . Omega-hydroxypalmitate O-feruloyl transferase (2.3.1.188)
203/01149	. . Platelet-activating factor acetyltransferase (2.3.1.149)	203/01189	. . Mycothiol synthase (2.3.1.189)
203/0115	. . Salutaridinol 7-O-acetyltransferase (2.3.1.150)	203/0119	. . Acetoin dehydrogenase (2.3.1.190)
203/01151	. . Benzophenone synthase (2.3.1.151)	203/01191	. . UDP-3-O-(3-hydroxymyristoyl)glucosamine N-acyltransferase (2.3.1.191)
203/01152	. . Alcohol O-cinnamoyltransferase (2.3.1.152)	203/01192	. . Glycine N-phenylacetyltransferase (2.3.1.192)
203/01153	. . Anthocyanin 5-aromatic acyltransferase (2.3.1.153)	203/01193	. . tRNA(Met) cytidine acetyltransferase (2.3.1.193)
203/01154	. . Propionyl-CoA C(2)-trimethyltridecanoyltransferase (2.3.1.154)	203/01194	. . Acetoacetyl-CoA synthase (2.3.1.194)
203/01155	. . Acetyl-CoA C-myristoyltransferase (2.3.1.155)	203/01195	. . (Z)-3-Hexen-1-ol acetyltransferase (2.3.1.195)
		203/01196	. . Benzyl alcohol O-benzoyltransferase (2.3.1.196)
		203/01197	. . dTDP-3-amino-3,6-dideoxy-alpha-D-galactopyranose 3-N-acetyltransferase (2.3.1.197)
		203/01198	. . Glycerol-3-phosphate 2-O-acyltransferase (2.3.1.198)
		203/01199	. . Very-long-chain 3-oxoacyl-CoA synthase (2.3.1.199)
		203/012	. . Lipoyl amidotransferase (2.3.1.200)

- 203/01201 . . UDP-2-acetamido-3-amino-2,3-dideoxy-glucuronate N-acetyltransferase (2.3.1.201)
- 203/01202 . . UDP-4-amino-4,6-dideoxy-N-acetyl-beta-L-altrosamine N-acetyltransferase (2.3.1.202)
- 203/01203 . . UDP-4-amino-4,6-dideoxy-N-acetyl-alpha-D-glucosamine N-acetyltransferase (2.3.1.203)
- 203/01204 . . Octanoyl-[GcvH]:protein N-octanoyltransferase (2.3.1.204)
- 203/01205 . . Fumigaclavine B O-acetyltransferase (2.3.1.205)
- 203/01206 . . 3,5,7-Trioxododecanoyl-CoA synthase (2.3.1.206)
- 203/01207 . . Beta-ketodecanoyl-[acyl-carrier-protein] synthase (2.3.1.207)
- 203/01208 . . 4-Hydroxycoumarin synthase (2.3.1.208)
- 203/01209 . . dTDP-4-amino-4,6-dideoxy-D-glucose acyltransferase (2.3.1.209)
- 203/0121 . . dTDP-4-amino-4,6-dideoxy-D-galactose acyltransferase (2.3.1.210)
- 203/02 . . Aminoacyltransferases (2.3.2)
- 203/02001 . . D-Glutamyltransferase (2.3.2.1)
- 203/02002 . . Gamma-glutamyltransferase (2.3.2.2)
- 203/02003 . . Lysyltransferase (2.3.2.3)
- 203/02004 . . Gamma-glutamylcyclotransferase (2.3.2.4)
- 203/02005 . . Glutamyl-peptide cyclotransferase (2.3.2.5)
- 203/02006 . . Leucyltransferase (2.3.2.6)
- 203/02007 . . Aspartyltransferase (2.3.2.7)
- 203/02008 . . Arginyltransferase (2.3.2.8)
- 203/02009 . . Agaritine gamma-glutamyltransferase (2.3.2.9)
- 203/0201 . . UDP-N-acetylmuramoylpentapeptide-lysine N6-alanyltransferase (2.3.2.10)
- 203/02011 . . Alanylphosphatidylglycerol synthase (2.3.2.11)
- 203/02012 . . Peptidyltransferase (2.3.2.12)
- 203/02013 . . Protein-glutamine gamma-glutamyltransferase (2.3.2.13), i.e. transglutaminase or factor XIII
- 203/02014 . . D-Alanine gamma-glutamyltransferase (2.3.2.14)
- 203/02015 . . Glutathione gamma-glutamylcysteinyltransferase (2.3.2.15), i.e. phytochelatin synthase
- 203/02016 . . Lipid II:glycine glycytransferase (2.3.2.16)
- 203/02017 . . N-Acetylmuramoyl-L-alanyl-D-glutamyl-L-lysyl-(N6-glycyl)-D-alanyl-D-alanine-diphosphoundecaprenyl-N-acetylglucosamine:glycin (2.3.2.17)
- 203/02018 . . N-Acetylmuramoyl-L-alanyl-D-glutamyl-L-lysyl-(N6-triglycine)-D-alanyl-D-alanine-diphosphoundecaprenyl-N-acetylglucosamine:glycin (2.3.2.18)
- 203/02019 . . Ribostamycin:4-(gamma-L-glutamylamino)-(S)-2-hydroxybutanoyl-[BtrI acyl-carrier protein] 4-(gamma-L-glutamylamino)-(S)-2-hydroxybutanoate transferase (2.3.2.19)
- 203/03 . . Acyl groups converted into alkyl on transfer (2.3.3)
- 203/03001 . . Citrate (Si)-synthase (2.3.3.1)
- 203/03002 . . Decylcitrate synthase (2.3.3.2)
- 203/03003 . . Citrate (Re)-synthase (2.3.3.3)
- 203/03004 . . Decylhomocitrate synthase (2.3.3.4)
- 203/03005 . . 2-Methylcitrate synthase (2.3.3.5)
- 203/03006 . . 2-Ethylmalate synthase (2.3.3.6)
- 203/03007 . . 3-Ethylmalate synthase (2.3.3.7)
- 203/03008 . . ATP citrate synthase (2.3.3.8)
- 203/03009 . . Malate synthase (2.3.3.9)
- 203/0301 . . Hydroxymethylglutaryl-CoA synthase (2.3.3.10)
- 203/03011 . . 2-Hydroxyglutarate synthase (2.3.3.11)
- 203/03012 . . 3-Propylmalate synthase (2.3.3.12)
- 203/03013 . . 2-Isopropylmalate synthase (2.3.3.13)
- 203/03014 . . Homocitrate synthase (2.3.3.14)
- 203/03015 . . Sulfoacetaldehyde acetyltransferase (2.3.3.15)
- 204/00 Glycosyltransferases (2.4)**
- 204/01 . . Hexosyltransferases (2.4.1)
- 204/01001 . . Phosphorylase (2.4.1.1)
- 204/01002 . . Dextrin dextranase (2.4.1.2)
- 204/01004 . . Amylosucrase (2.4.1.4)
- 204/01005 . . Dextranucrase (2.4.1.5)
- 204/01007 . . Sucrose phosphorylase (2.4.1.7)
- 204/01008 . . Maltose phosphorylase (2.4.1.8)
- 204/01009 . . Inulosucrase (2.4.1.9)
- 204/0101 . . Levansucrase (2.4.1.10)
- 204/01011 . . Glycogen(starch) synthase (2.4.1.11)
- 204/01012 . . Cellulose synthase (UDP-forming) (2.4.1.12)
- 204/01013 . . Sucrose synthase (2.4.1.13)
- 204/01014 . . Sucrose-phosphate synthase (2.4.1.14)
- 204/01015 . . Alpha,alpha-trehalose-phosphate synthase (UDP-forming) (2.4.1.15)
- 204/01016 . . Chitin synthase (2.4.1.16)
- 204/01017 . . Glucuronosyltransferase (2.4.1.17)
- 204/01018 . . 1,4-Alpha-glucan branching enzyme (2.4.1.18), i.e. glucan branching enzyme
- 204/01019 . . Cyclomaltodextrin glucanotransferase (2.4.1.19)
- 204/0102 . . Cellobiose phosphorylase (2.4.1.20)
- 204/01021 . . Starch synthase (2.4.1.21)
- 204/01022 . . Lactose synthase (2.4.1.22)
- 204/01023 . . Sphingosine beta-galactosyltransferase (2.4.1.23)
- 204/01024 . . 1,4-Alpha-glucan 6-alpha-glucosyltransferase (2.4.1.24)
- 204/01025 . . 4-Alpha-glucanotransferase (2.4.1.25)
- 204/01026 . . DNA alpha-glucosyltransferase (2.4.1.26)
- 204/01027 . . DNA beta-glucosyltransferase (2.4.1.27)
- 204/01028 . . Glucosyl-DNA beta-glucosyltransferase (2.4.1.28)
- 204/01029 . . Cellulose synthase (GDP-forming) (2.4.1.29)
- 204/0103 . . 1,3-Beta-oligoglucan phosphorylase (2.4.1.30)
- 204/01031 . . Laminaribiose phosphorylase (2.4.1.31)
- 204/01032 . . Glucomannan 4-beta-mannosyltransferase (2.4.1.32)
- 204/01033 . . Alginate synthase (2.4.1.33)
- 204/01034 . . 1,3-Beta-glucan synthase (2.4.1.34)
- 204/01035 . . Phenol beta-glucosyltransferase (2.4.1.35)
- 204/01036 . . Alpha,alpha-trehalose-phosphate synthase (GDP-forming) (2.4.1.36)
- 204/01037 . . Fucosylgalactoside 3-alpha-galactosyltransferase (2.4.1.37)
- 204/01038 . . Beta-N-acetylglucosaminylglycopeptide beta-1,4-galactosyltransferase (2.4.1.38)
- 204/01039 . . Steroid N-acetylglucosaminyltransferase (2.4.1.39)
- 204/0104 . . Glycoprotein-fucosylgalactoside alpha-N-acetylglucosaminyltransferase (2.4.1.40)
- 204/01041 . . Polypeptide N-acetylglucosaminyltransferase (2.4.1.41)
- 204/01043 . . Polygalacturonate 4-alpha-galacturonosyltransferase (2.4.1.43)
- 204/01044 . . Lipopolysaccharide 3-alpha-galactosyltransferase (2.4.1.44)
- 204/01045 . . 2-Hydroxyacylsphingosine 1-beta-galactosyltransferase (2.4.1.45)
- 204/01046 . . Monogalactosyldiacylglycerol synthase (2.4.1.46)

204/01047	. . N-Acylsphingosine galactosyltransferase (2.4.1.47)	204/01092	. . (N-acetylneuraminy)-galactosylglucosylceramide N-acetylglucosaminyltransferase (2.4.1.92)
204/01048	. . Heteroglycan alpha-mannosyltransferase (2.4.1.48)	204/01094	. . Protein N-acetylglucosaminyltransferase (2.4.1.94)
204/01049	. . Cellodextrin phosphorylase (2.4.1.49)	204/01095	. . Bilirubin-glucuronoside glucuronosyltransferase (2.4.1.95)
204/0105	. . Procollagen galactosyltransferase (2.4.1.50)	204/01096	. . sn-Glycerol-3-phosphate 1-galactosyltransferase (2.4.1.96)
204/01051	. . UDP-N-acetylglucosamine-glycoprotein N-acetylglucosaminyltransferase (2.4.1.51) ( <a href="#">C12Y 204/01101</a> , <a href="#">C12Y 204/01143</a> - <a href="#">C12Y 204/01145</a> take precedence)	204/01097	. . 1,3-Beta-D-glucan phosphorylase (2.4.1.97)
204/01052	. . Poly(glycerol-phosphate) alpha-glucosyltransferase (2.4.1.52)	204/01099	. . Sucrose:sucrose fructosyltransferase (2.4.1.99)
204/01053	. . Poly(ribitol-phosphate) beta-glucosyltransferase (2.4.1.53)	204/011	. . 2,1-Fructan:2,1-fructan 1-fructosyltransferase (2.4.1.100)
204/01054	. . Undecaprenyl-phosphate mannosyltransferase (2.4.1.54)	204/01101	. . Alpha-1,3-mannosyl-glycoprotein 2-beta-N-acetylglucosaminyltransferase (2.4.1.101)
204/01056	. . Lipopolysaccharide N-acetylglucosaminyltransferase (2.4.1.56)	204/01102	. . Beta-1,3-galactosyl-O-glycosyl-glycoprotein beta-1,6-N-acetylglucosaminyltransferase (2.4.1.102)
204/01057	. . Phosphatidylinositol alpha-mannosyltransferase (2.4.1.57)	204/01103	. . Alizarin 2-beta-glucosyltransferase (2.4.1.103)
204/01058	. . Lipopolysaccharide glucosyltransferase I (2.4.1.58)	204/01104	. . o-Dihydroxycoumarin 7-O-glucosyltransferase (2.4.1.104)
204/0106	. . Abequosyltransferase (2.4.1.60)	204/01105	. . Vitexin beta-glucosyltransferase (2.4.1.105)
204/01062	. . Ganglioside galactosyltransferase (2.4.1.62)	204/01106	. . Isovitexin beta-glucosyltransferase (2.4.1.106)
204/01063	. . Linamarin synthase (2.4.1.63)	204/01109	. . Dolichyl-phosphate-mannose-protein mannosyltransferase (2.4.1.109)
204/01064	. . Alpha,alpha-trehalose phosphorylase (2.4.1.64)	204/0111	. . tRNA-queuosine beta-mannosyltransferase (2.4.1.110)
204/01065	. . 3-Galactosyl-N-acetylglucosaminide 4-alpha-L-fucosyltransferase (2.4.1.65), i.e. alpha-1-3 fucosyltransferase	204/01111	. . Coniferyl-alcohol glucosyltransferase (2.4.1.111)
204/01066	. . Procollagen glucosyltransferase (2.4.1.66)	204/01113	. . Alpha-1,4-glucan-protein synthase (ADP-forming) (2.4.1.113)
204/01067	. . Galactinol--raffinose galactosyltransferase (2.4.1.67)	204/01114	. . 2-Coumarate O-beta-glucosyltransferase (2.4.1.114)
204/01068	. . Glycoprotein 6-alpha-L-fucosyltransferase (2.4.1.68), i.e. FUT8	204/01115	. . Anthocyanidin 3-O-glucosyltransferase (2.4.1.115)
204/01069	. . Galactoside 2-alpha-L-fucosyltransferase (2.4.1.69)	204/01116	. . Cyanidin 3-O-rutinoside 5-O-glucosyltransferase (2.4.1.116)
204/0107	. . Poly(ribitol-phosphate) N-acetylglucosaminyltransferase (2.4.1.70)	204/01117	. . Dolichyl-phosphate beta-glucosyltransferase (2.4.1.117)
204/01071	. . Arylamine glucosyltransferase (2.4.1.71)	204/01118	. . Cytokinin 7-beta-glucosyltransferase (2.4.1.118)
204/01073	. . Lipopolysaccharide glucosyltransferase II (2.4.1.73)	204/0112	. . Sinapate 1-glucosyltransferase (2.4.1.120)
204/01074	. . Glycosaminoglycan galactosyltransferase (2.4.1.74)	204/01121	. . Indole-3-acetate beta-glucosyltransferase (2.4.1.121)
204/01078	. . Phosphopolyprenol glucosyltransferase (2.4.1.78)	204/01122	. . Glycoprotein-N-acetylglucosamine 3-beta-galactosyltransferase (2.4.1.122)
204/01079	. . Globotriaosylceramide 3-beta-N-acetylglucosaminyltransferase (2.4.1.79)	204/01123	. . Inositol 3-alpha-galactosyltransferase (2.4.1.123), i.e. galactinol-synthase
204/0108	. . Ceramide glucosyltransferase (2.4.1.80)	204/01125	. . Sucrose--1,6-alpha-glucan 3(6)-alpha-glucosyltransferase (2.4.1.125)
204/01081	. . Flavone 7-O-beta-glucosyltransferase (2.4.1.81)	204/01126	. . Hydroxycinnamate 4-beta-glucosyltransferase (2.4.1.126)
204/01082	. . Galactinol--sucrose galactosyltransferase (2.4.1.82)	204/01127	. . Monoterpenol beta-glucosyltransferase (2.4.1.127)
204/01083	. . Dolichyl-phosphate beta-D-mannosyltransferase (2.4.1.83)	204/01128	. . Scopoletin glucosyltransferase (2.4.1.128)
204/01085	. . Cyanohydrin beta-glucosyltransferase (2.4.1.85)	204/01129	. . Peptidoglycan glycosyltransferase (2.4.1.129)
204/01086	. . Glucosaminylgalactosylglucosylceramide beta-galactosyltransferase (2.4.1.86)	204/0113	. . Dolichyl-phosphate-mannose-glycolipid alpha-mannosyltransferase (2.4.1.130) ( <a href="#">C12Y 204/01258</a> - <a href="#">C12Y 204/01261</a> take precedence)
204/01087	. . N-Acetylglucosaminide 3-alpha-galactosyltransferase (2.4.1.87), i.e. alpha-1,3-galactosyltransferase	204/01131	. . GDP-Man:Man3GlcNAc2-PP-dolichol alpha-1,2-mannosyltransferase (2.4.1.131)
204/01088	. . Globoside alpha-N-acetylglucosaminyltransferase (2.4.1.88)	204/01132	. . GDP-Man:Man1GlcNAc2-PP-dolichol alpha-1,3-mannosyltransferase (2.4.1.132)
204/0109	. . N-Acetylglucosamine synthase (2.4.1.90)	204/01133	. . Xylosylprotein 4-beta-galactosyltransferase (2.4.1.133)
204/01091	. . Flavonol 3-O-glucosyltransferase (2.4.1.91)		



204/01134	. . Galactosylxylosylprotein 3-beta-galactosyltransferase (2.4.1.134)	204/01166	. . Raffinose--raffinose alpha-galactosyltransferase (2.4.1.166)
204/01135	. . Galactosylgalactosylxylosylprotein 3-beta-glucuronosyltransferase (2.4.1.135)	204/01167	. . Sucrose 6F-alpha-galactosyltransferase (2.4.1.167)
204/01136	. . Gallate 1-beta-glucosyltransferase (2.4.1.136)	204/01168	. . Xyloglucan 4-glucosyltransferase (2.4.1.168)
204/01137	. . sn-Glycerol-3-phosphate 2-alpha-galactosyltransferase (2.4.1.137)	204/0117	. . Isoflavone 7-O-glucosyltransferase (2.4.1.170)
204/01138	. . Mannotetraose 2-alpha-N-acetylglucosaminyltransferase (2.4.1.138)	204/01171	. . Methyl-ONN-azoxymethanol beta-D-glucosyltransferase (2.4.1.171)
204/01139	. . Maltose synthase (2.4.1.139)	204/01172	. . Salicyl-alcohol beta-D-glucosyltransferase (2.4.1.172)
204/0114	. . Alternansucrase (2.4.1.140)	204/01173	. . Sterol 3-beta-glucosyltransferase (2.4.1.173)
204/01141	. . N-Acetylglucosaminylidiphosphodolichol N-acetylglucosaminyltransferase (2.4.1.141)	204/01174	. . Glucuronylgalactosylproteoglycan 4-beta-N-acetylglactosaminyltransferase (2.4.1.174), i.e. chondroitin sulfate N-acetylglactosaminyltransferase-1
204/01142	. . Chitobiosyldiphosphodolichol beta-mannosyltransferase (2.4.1.142)	204/01175	. . Glucuronosyl-N-acetylglactosaminylproteoglycan 4-beta-N-acetylglactosaminyltransferase II (2.4.1.175)
204/01143	. . Alpha-1,6-mannosyl-glycoprotein 2-beta-N-acetylglucosaminyltransferase (2.4.1.143)	204/01176	. . Gibberellin beta-D-glucosyltransferase (2.4.1.176)
204/01144	. . Beta-1,4-mannosyl-glycoprotein 4-beta-N-acetylglucosaminyltransferase (2.4.1.144)	204/01177	. . Cinnamate beta-D-glucosyltransferase (2.4.1.177)
204/01145	. . Alpha-1,3-mannosyl-glycoprotein 4-beta-N-acetylglucosaminyltransferase (2.4.1.145)	204/01178	. . Hydroxymandelonitrile glucosyltransferase (2.4.1.178)
204/01146	. . Beta-1,3-galactosyl-O-glycosyl-glycoprotein beta-1,3-N-acetylglucosaminyltransferase (2.4.1.146)	204/01179	. . Lactosylceramide beta-1,3-galactosyltransferase (2.4.1.179)
204/01147	. . Acetylglactosaminyl-O-glycosyl-glycoprotein beta-1,3-N-acetylglucosaminyltransferase (2.4.1.147)	204/0118	. . Lipopolysaccharide N-acetylmannosaminouronosyltransferase (2.4.1.180)
204/01148	. . Acetylglactosaminyl-O-glycosyl-glycoprotein beta-1,6-N-acetylglucosaminyltransferase (2.4.1.148)	204/01181	. . Hydroxyanthraquinone glucosyltransferase (2.4.1.181)
204/01149	. . N-Acetylglucosaminide beta-1,3-N-acetylglucosaminyltransferase (2.4.1.149)	204/01182	. . Lipid-A-disaccharide synthase (2.4.1.182)
204/0115	. . N-Acetylglucosaminide beta-1,6-N-acetylglucosaminyl-transferase (2.4.1.150)	204/01183	. . Alpha-1,3-glucan synthase (2.4.1.183)
204/01152	. . 4-Galactosyl-N-acetylglucosaminide 3-alpha-L-fucosyltransferase (2.4.1.152)	204/01184	. . Galactolipid galactosyltransferase (2.4.1.184)
204/01153	. . Dolichyl-phosphate alpha-N-acetylglucosaminyltransferase (2.4.1.153)	204/01185	. . Flavanone 7-O-beta-glucosyltransferase (2.4.1.185)
204/01155	. . Alpha-1,6-mannosyl-glycoprotein 6-beta-N-acetylglucosaminyltransferase (2.4.1.155)	204/01186	. . Glycogenin glucosyltransferase (2.4.1.186)
204/01156	. . Indolylacetyl-myo-inositol galactosyltransferase (2.4.1.156)	204/01187	. . N-Acetylglucosaminylidiphosphoundecaprenol N-acetyl-beta-D-mannosaminyltransferase (2.4.1.187)
204/01157	. . 1,2-Diacylglycerol 3-glucosyltransferase (2.4.1.157)	204/01188	. . N-Acetylglucosaminylidiphosphoundecaprenol glucosyltransferase (2.4.1.188)
204/01158	. . 13-Hydroxydocosanoate 13-beta-glucosyltransferase (2.4.1.158)	204/01189	. . Luteolin 7-O-glucuronosyltransferase (2.4.1.189)
204/01159	. . Flavonol-3-O-glucoside L-rhamnosyltransferase (2.4.1.159)	204/0119	. . Luteolin-7-O-glucuronide 2"-O-glucuronosyltransferase (2.4.1.190)
204/0116	. . Pyridoxine 5'-O-beta-D-glucosyltransferase (2.4.1.160)	204/01191	. . Luteolin-7-O-digluconide 4'-O-glucuronosyltransferase (2.4.1.191)
204/01161	. . Oligosaccharide 4-alpha-D-glucosyltransferase (2.4.1.161)	204/01192	. . Nuatigenin 3-beta-glucosyltransferase (2.4.1.192)
204/01162	. . Aldose beta-D-fructosyltransferase (2.4.1.162)	204/01193	. . Sarsapogenin 3-beta-glucosyltransferase (2.4.1.193)
204/01163	. . Beta-galactosyl-N-acetylglucosaminylgalactosylglucosyl-ceramide beta-1,3-acetylglucosaminyltransferase (2.4.1.163)	204/01194	. . 4-Hydroxybenzoate 4-O-beta-D-glucosyltransferase (2.4.1.194)
204/01164	. . Galactosyl-N-acetylglucosaminylgalactosylglucosyl-ceramide beta-1,6-N-acetylglucosaminyltransferase (2.4.1.164)	204/01195	. . N-Hydroxythioamide S-beta-glucosyltransferase (2.4.1.195)
204/01165	. . N-Acetylneuraminylgalactosylglucosylceramide beta-1,4-N-acetylglactosaminyltransferase (2.4.1.165)	204/01196	. . Nicotinate glucosyltransferase (2.4.1.196)
		204/01197	. . High-mannose-oligosaccharide beta-1,4-N-acetylglucosaminyltransferase (2.4.1.197)
		204/01198	. . Phosphatidylinositol N-acetylglucosaminyltransferase (2.4.1.198)
		204/01199	. . Beta-mannosylphosphodecaprenol--mannooligosaccharide 6-mannosyltransferase (2.4.1.199)
		204/01201	. . Alpha-1,6-mannosyl-glycoprotein 4-beta-N-acetylglucosaminyltransferase (2.4.1.201)

204/01202	. . 2,4-Dihydroxy-7-methoxy-2H-1,4-benzoxazin-3(4H)-one 2-D-glucosyltransferase (2.4.1.202)	204/01242	. . NDP-glucose--starch glucosyltransferase (2.4.1.242)
204/01203	. . Trans-zeatin O-beta-D-glucosyltransferase (2.4.1.203)	204/01243	. . 6G-Fructosyltransferase (2.4.1.243)
204/01205	. . Galactogen 6-beta-galactosyltransferase (2.4.1.205)	204/01244	. . N-Acetyl-beta-glucosaminyl-glycoprotein 4-beta-N-acetylglactosaminyltransferase (2.4.1.244)
204/01206	. . Lactosylceramide 1,3-N-acetyl-beta-D-glucosaminyltransferase (2.4.1.206)	204/01245	. . Alpha,alpha-trehalose synthase (2.4.1.245)
204/01207	. . Xyloglucan:xyloglucosyl transferase (2.4.1.207)	204/01246	. . Mannosylfructose-phosphate synthase (2.4.1.246)
204/01208	. . Diglucosyl diacylglycerol synthase (2.4.1.208)	204/01247	. . Beta-D-galactosyl-(1->4)-L-rhamnose phosphorylase (2.4.1.247)
204/01209	. . Cis-p-coumarate glucosyltransferase (2.4.1.209)	204/01248	. . Cycloisomaltooligosaccharide glucanotransferase (2.4.1.248)
204/0121	. . Limonoid glucosyltransferase (2.4.1.210)	204/01249	. . Delphinidin 3',5'-O-glucosyltransferase (2.4.1.249)
204/01211	. . 1,3-Beta-galactosyl-N-acetylhexosamine phosphorylase (2.4.1.211)	204/0125	. . D-Inositol-3-phosphate glycosyltransferase (2.4.1.250)
204/01212	. . Hyaluronan synthase (2.4.1.212)	204/01251	. . GlcA-beta-(1->2)-D-Man-alpha-(1->3)-D-Glc-beta-(1->4)-D-Glc-alpha-1-diphosphoundecaprenol 4-beta-mannosyltransferase (2.4.1.251)
204/01213	. . Glucosylglycerol-phosphate synthase (2.4.1.213)	204/01252	. . GDP-mannose:cellobiosyl-diphosphopolyprenol alpha-mannosyltransferase (2.4.1.252)
204/01214	. . Glycoprotein 3-alpha-L-fucosyltransferase (2.4.1.214)	204/01253	. . Baicalein 7-O-glucuronosyltransferase (2.4.1.253)
204/01215	. . Cis-zeatin O-beta-D-glucosyltransferase (2.4.1.215)	204/01254	. . Cyanidin-3-O-glucoside 2-O-glucuronosyltransferase (2.4.1.254)
204/01216	. . Trehalose 6-phosphate phosphorylase (2.4.1.216)	204/01255	. . Protein O-GlcNAc transferase (2.4.1.255)
204/01217	. . Mannosyl-3-phosphoglycerate synthase (2.4.1.217)	204/01256	. . Dolichyl-P-Glc:Glc2Man9GlcNAc2-PP-dolichol alpha-1,2-glucosyltransferase (2.4.1.256)
204/01218	. . Hydroquinone glucosyltransferase (2.4.1.218)	204/01257	. . GDP-Man:Man2GlcNAc2-PP-dolichol alpha-1,6-mannosyltransferase (2.4.1.257)
204/01219	. . Vomilenine glucosyltransferase (2.4.1.219)	204/01258	. . Dolichyl-P-Man:Man5GlcNAc2-PP-dolichol alpha-1,3-mannosyltransferase (2.4.1.258)
204/0122	. . Indoxyl-UDPG glucosyltransferase (2.4.1.220)	204/01259	. . Dolichyl-P-Man:Man6GlcNAc2-PP-dolichol alpha-1,2-mannosyltransferase (2.4.1.259)
204/01221	. . Peptide-O-fucosyltransferase (2.4.1.221)	204/0126	. . Dolichyl-P-Man:Man7GlcNAc2-PP-dolichol alpha-1,6-mannosyltransferase (2.4.1.260)
204/01222	. . O-Fucosylpeptide 3-beta-N-acetylglucosaminyltransferase (2.4.1.222)	204/01261	. . Dolichyl-P-Man:Man8GlcNAc2-PP-dolichol alpha-1,2-mannosyltransferase (2.4.1.261)
204/01223	. . Glucuronyl-galactosyl-proteoglycan 4-alpha-N-acetylglucosaminyltransferase (2.4.1.223)	204/01262	. . Soyasapogenol glucuronosyltransferase (2.4.1.262)
204/01224	. . Glucuronosyl-N-acetylglucosaminyl-proteoglycan 4-alpha-N-acetylglucosaminyltransferase (2.4.1.224)	204/01263	. . Abscisate beta-glucosyltransferase (2.4.1.263)
204/01225	. . N-Acetylglucosaminyl-proteoglycan 4-beta-glucuronosyltransferase (2.4.1.225)	204/01264	. . D-Man-alpha-(1->3)-D-Glc-beta-(1->4)-D-Glc-alpha-1-diphosphoundecaprenol 2-beta-glucuronyltransferase (2.4.1.264)
204/01226	. . N-Acetylglactosaminyl-proteoglycan 3-beta-glucuronosyltransferase (2.4.1.226), i.e. chondroitin sulfate glucuronyltransferase	204/01265	. . Dolichyl-P-Glc:Glc1Man9GlcNAc2-PP-dolichol alpha-1,3-glucosyltransferase (2.4.1.265)
204/01227	. . Undecaprenyldiphospho-muramoylpentapeptide beta-N-acetylglucosaminyltransferase (2.4.1.227)	204/01266	. . Glucosyl-3-phosphoglycerate synthase (2.4.1.266)
204/01228	. . Lactosylceramide 4-alpha-galactosyltransferase (2.4.1.228)	204/01267	. . Dolichyl-P-Glc:Man9GlcNAc2-PP-dolichol alpha-1,3-glucosyltransferase (2.4.1.267)
204/01229	. . [SklP-protein]-hydroxyproline N-acetylglucosaminyltransferase (2.4.1.229)	204/01268	. . Glucosylglycerate synthase (2.4.1.268)
204/0123	. . Kojibiose phosphorylase (2.4.1.230)	204/01269	. . Mannosylglycerate synthase (2.4.1.269)
204/01231	. . Alpha,alpha-trehalose phosphorylase (configuration-retaining) (2.4.1.231)	204/0127	. . Mannosylglucosyl-3-phosphoglycerate synthase (2.4.1.270)
204/01232	. . Initiation-specific alpha-1,6-mannosyltransferase (2.4.1.232)	204/01271	. . Crocetin glucosyltransferase (2.4.1.271)
204/01234	. . Kaempferol 3-O-galactosyltransferase (2.4.1.234)	204/01272	. . Soyasapogenol B glucuronide galactosyltransferase (2.4.1.272)
204/01236	. . Flavanone 7-O-glucoside 2"-O-beta-L-rhamnosyltransferase (2.4.1.236)	204/01273	. . Soyasaponin III rhamnosyltransferase (2.4.1.273)
204/01237	. . Flavonol 7-O-beta-glucosyltransferase (2.4.1.237)	204/01274	. . Glucosylceramide beta-1,4-galactosyltransferase (2.4.1.274)
204/01238	. . Anthocyanin 3'-O-beta-glucosyltransferase (2.4.1.238)	204/01275	. . Lactotriaosylceramide beta-1,4-galactosyltransferase (2.4.1.275)
204/01239	. . Flavonol-3-O-glucoside glucosyltransferase (2.4.1.239)	204/01276	. . Zeaxanthin glucosyltransferase (2.4.1.276)
204/0124	. . Flavonol-3-O-glycoside glucosyltransferase (2.4.1.240)	204/01277	. . Glycosyltransferase DesVII (2.4.1.277)
204/01241	. . Digalactosyldiacylglycerol synthase (2.4.1.241)	204/01278	. . Desosaminyl transferase EryCIII (2.4.1.278)

204/01279	. . Nigerose phosphorylase (2.4.1.279)	204/02025	. . Flavone apiosyltransferase (2.4.2.25)
204/0128	. . N,N'-Diacetylchitobiose phosphorylase (2.4.1.280)	204/02026	. . Protein xylosyltransferase (2.4.2.26)
204/01281	. . 4-O-Beta-D-mannosyl-D-glucose phosphorylase (2.4.1.281)	204/02027	. . dTDP-dihydrostreptose--streptidine-6-phosphate dihydrostreptosyltransferase (2.4.2.27)
204/01282	. . 3-O-Alpha-D-glucosyl-L-rhamnose phosphorylase (2.4.1.282)	204/02028	. . S-Methyl-5'-thioadenosine phosphorylase (2.4.2.28)
204/01283	. . 2-Deoxystreptamine N-acetyl-D-glucosaminyltransferase (2.4.1.283)	204/02029	. . tRNA-guanosine34 transglycosylase (2.4.2.29)
204/01284	. . 2-Deoxystreptamine glucosyltransferase (2.4.1.284)	204/0203	. . NAD+ ADP-ribosyltransferase (2.4.2.30), i.e. tankyrase or poly(ADP-ribose) polymerase
204/01285	. . UDP-GlcNAc:ribostamycin N-acetylglucosaminyltransferase (2.4.1.285)	204/02031	. . NAD+-protein-arginine ADP-ribosyltransferase (2.4.2.31)
204/01286	. . Chalcone 4'-O-glucosyltransferase (2.4.1.286)	204/02032	. . Dolichyl-phosphate D-xylosyltransferase (2.4.2.32)
204/01287	. . Rhamnopyranosyl-N-acetylglucosaminyl-diphospho-decaprenol beta-1,3/1,4-galactofuranosyltransferase (2.4.1.287)	204/02033	. . Dolichyl-xylosyl-phosphate--protein xylosyltransferase (2.4.2.33)
204/01288	. . Galactofuranosylgalactofuranosylrhamnosyl-N-acetylglucosaminyl-diphospho-decaprenol beta-1,5/1,6-galactofuranosyltransferase (2.4.1.288)	204/02034	. . Indolylacetylinositol arabinosyltransferase (2.4.2.34)
204/01289	. . N-Acetylglucosaminyl-diphospho-decaprenol L-rhamnosyltransferase (2.4.1.289)	204/02035	. . Flavonol-3-O-glycoside xylosyltransferase (2.4.2.35)
204/0129	. . N,N'-Diacetyl bacillosaminyl-diphospho-undecaprenol alpha-1,3-N-acetyl galactosaminyltransferase (2.4.1.290)	204/02036	. . NAD(+)--diphthamide ADP-ribosyltransferase (2.4.2.36)
204/01291	. . N-Acetyl galactosamine-N,N'-diacetyl bacillosaminyl-diphospho-undecaprenol 4-alpha-N-acetyl galactosaminyltransferase (2.4.1.291)	204/02037	. . NAD(+)--dinitrogen-reductase ADP-D-ribosyltransferase (2.4.2.37)
204/01292	. . GalNAc-alpha-(1→4)-GalNAc-alpha-(1→3)-diNAcBac-PP-undecaprenol alpha-1,4-N-acetyl-D-galactosaminyltransferase (2.4.1.292)	204/02038	. . Glycoprotein 2-beta-D-xylosyltransferase (2.4.2.38)
204/01293	. . GalNAc5-diNAcBac-PP-undecaprenol beta-1,3-glucosyltransferase (2.4.1.293)	204/02039	. . Xyloglucan 6-xylosyltransferase (2.4.2.39)
204/02	. . Pentosyltransferases (2.4.2)	204/0204	. . Zeatin O-beta-D-xylosyltransferase (2.4.2.40)
204/02001	. . Purine-nucleoside phosphorylase (2.4.2.1)	204/02041	. . Xylogalacturonan beta-1,3-xylosyltransferase (2.4.2.41)
204/02002	. . Pyrimidine-nucleoside phosphorylase (2.4.2.2)	204/02042	. . UDP-D-xylose:beta-D-glucoside alpha-1,3-D-xylosyltransferase (2.4.2.42)
204/02003	. . Uridine phosphorylase (2.4.2.3)	204/02043	. . Lipid IVA 4-amino-4-deoxy-L-arabinosyltransferase (2.4.2.43)
204/02004	. . Thymidine phosphorylase (2.4.2.4)	204/02044	. . S-Methyl-5'-thioinosine phosphorylase (2.4.2.44)
204/02005	. . Nucleoside ribosyltransferase (2.4.2.5)	204/02045	. . Decaprenyl-phosphate phosphoribosyltransferase (2.4.2.45)
204/02006	. . Nucleoside deoxyribosyltransferase (2.4.2.6)	204/02046	. . Galactan 5-O-arabinofuranosyltransferase (2.4.2.46)
204/02007	. . Adenine phosphoribosyltransferase (2.4.2.7)	204/02047	. . Arabinofuranan 3-O-arabinosyltransferase (2.4.2.47)
204/02008	. . Hypoxanthine phosphoribosyltransferase (2.4.2.8)	204/02048	. . tRNA-guanine15 transglycosylase (2.4.2.48)
204/02009	. . Uracil phosphoribosyltransferase (2.4.2.9)	204/99	. . transferring other glycosyl groups (2.4.99)
204/0201	. . Orotate phosphoribosyltransferase (2.4.2.10)	204/99001	. . Beta-galactoside alpha-2,6-sialyltransferase (2.4.99.1)
204/02011	. . Nicotinate phosphoribosyltransferase (2.4.2.11)	204/99002	. . Monosialoganglioside sialyltransferase (2.4.99.2)
204/02012	. . Nicotinamide phosphoribosyltransferase (2.4.2.12), i.e. visfatin	204/99003	. . Alpha-N-acetyl galactosaminide alpha-2,6-sialyltransferase (2.4.99.3)
204/02014	. . Amidophosphoribosyltransferase (2.4.2.14)	204/99004	. . Beta-galactoside alpha-2,3-sialyltransferase (2.4.99.4)
204/02015	. . Guanosine phosphorylase (2.4.2.15)	204/99005	. . Galactosyldiacylglycerol alpha-2,3-sialyltransferase (2.4.99.5)
204/02016	. . Urate-ribonucleotide phosphorylase (2.4.2.16)	204/99006	. . N-Acetyl lactosaminide alpha-2,3-sialyltransferase (2.4.99.6)
204/02017	. . ATP phosphoribosyltransferase (2.4.2.17)	204/99007	. . Alpha-N-acetylneuraminyl-2,3-beta-galactosyl-1,3-N-acetyl galactosaminide 6-alpha-sialyltransferase (2.4.99.7)
204/02018	. . Anthranilate phosphoribosyltransferase (2.4.2.18)	204/99008	. . Alpha-N-acetylneuraminate alpha-2,8-sialyltransferase (2.4.99.8)
204/02019	. . Nicotinate-nucleotide diphosphorylase (carboxylating) (2.4.2.19)	204/99009	. . Lactosylceramide alpha-2,3-sialyltransferase (2.4.99.9)
204/0202	. . Dioxotetrahydropyrimidine phosphoribosyltransferase (2.4.2.20)	204/9901	. . Neolactotetraosylceramide alpha-2,3-sialyltransferase (2.4.99.10)
204/02021	. . Nicotinate-nucleotide--dimethylbenzimidazole phosphoribosyltransferase (2.4.2.21)	204/99011	. . Lactosylceramide alpha-2,6-N-sialyltransferase (2.4.99.11)
204/02022	. . Xanthine phosphoribosyltransferase (2.4.2.22)		
204/02023	. . Deoxyuridine phosphorylase (2.4.2.23)		
204/02024	. . 1,4-Beta-D-xylan synthase (2.4.2.24)		

- 204/99012 . . Lipid IVA 3-deoxy-D-manno-octulosonic acid transferase (2.4.99.12)
- 204/99013 . . (KDO)-lipid IVA 3-deoxy-D-manno-octulosonic acid transferase (2.4.99.13)
- 204/99014 . . (KDO)2-lipid IVA (2-8) 3-deoxy-D-manno-octulosonic acid transferase (2.4.99.14)
- 204/99015 . . (KDO)3-lipid IVA (2-4) 3-deoxy-D-manno-octulosonic acid transferase (2.4.99.15)
- 204/99016 . . Starch synthase (maltosyl-transferring) (2.4.99.16)
- 204/99017 . . S-Adenosylmethionine:tRNA ribosyltransferase-isomerase (2.4.99.17)
- 204/99018 . . Dolichyl-diphosphooligosaccharide—protein glycotransferase (2.4.99.18)
- 204/99019 . . Undecaprenyl-diphosphooligosaccharide—protein glycotransferase (2.4.99.19)
- 205/00      Transferases transferring alkyl or aryl groups, other than methyl groups (2.5)**
- 205/01 . . transferring alkyl or aryl groups, other than methyl groups (2.5.1)
- 205/01001 . . Dimethylallyltranstransferase (2.5.1.1)
- 205/01002 . . Thiamine pyridinylase (2.5.1.2)
- 205/01003 . . Thiamine-phosphate diphosphorylase (2.5.1.3)
- 205/01004 . . Adenosylmethionine cyclotransferase (2.5.1.4)
- 205/01005 . . Galactose-6-sulfurylase (2.5.1.5)
- 205/01006 . . Methionine adenosyltransferase (2.5.1.6), i.e. adenosylmethionine synthetase
- 205/01007 . . UDP-N-acetylglucosamine 1-carboxyvinyltransferase (2.5.1.7)
- 205/01009 . . Riboflavin synthase (2.5.1.9)
- 205/0101 . . (2E,6E)-Farnesyl diphosphate synthase (2.5.1.10), i.e. geranyltranstransferase
- 205/01011 . . Trans-octaprenyltranstransferase (2.5.1.11) ([C12Y 205/01084](#), [C12Y 205/01085 take precedence](#))
- 205/01015 . . Dihydropteroate synthase (2.5.1.15)
- 205/01016 . . Spermidine synthase (2.5.1.16)
- 205/01017 . . Cob(I)yrinic acid a,c-diamide adenosyltransferase (2.5.1.17)
- 205/01018 . . Glutathione transferase (2.5.1.18)
- 205/01019 . . 3-Phosphoshikimate 1-carboxyvinyltransferase (2.5.1.19), i.e. 5-enolpyruvylshikimate-3-phosphate synthase
- 205/0102 . . Rubber cis-polyisoprenylcistransferase (2.5.1.20)
- 205/01021 . . Squalene synthase (2.5.1.21), i.e. farnesyl-diphosphate farnesyltransferase
- 205/01022 . . Spermine synthase (2.5.1.22)
- 205/01023 . . Sym-norspermidine synthase (2.5.1.23)
- 205/01024 . . Discadenine synthase (2.5.1.24)
- 205/01025 . . tRNA-uridine aminocarboxypropyltransferase (2.5.1.25)
- 205/01026 . . Alkylglycerone-phosphate synthase (2.5.1.26)
- 205/01027 . . Adenylate dimethylallyltransferase (2.5.1.27)
- 205/01028 . . Dimethylallylcistransferase (2.5.1.28)
- 205/01029 . . Geranylgeranyl diphosphate synthase (2.5.1.29)
- 205/0103 . . Heptaprenyl diphosphate synthase (2.5.1.30)
- 205/01031 . . Ditrans,polycis-undecaprenyl-diphosphate synthase [(2E,6E)-farnesyl-diphosphate specific] (2.5.1.31)
- 205/01032 . . 15-Cis-phytoene synthase (2.5.1.32)
- 205/01033 . . Trans-pentaprenyltranstransferase (2.5.1.33) ([C12Y 205/01082](#), [C12Y 205/01083 take precedence](#))
- 205/01034 . . 4-Dimethylallyltryptophan synthase (2.5.1.34)
- 205/01035 . . Aspulvinone dimethylallyltransferase (2.5.1.35)
- 205/01036 . . Trihydroxypterocarpan dimethylallyltransferase (2.5.1.36)
- 205/01038 . . Isonocardicin synthase (2.5.1.38)
- 205/01039 . . 4-Hydroxybenzoate polyprenyltransferase (2.5.1.39)
- 205/01041 . . Phosphoglycerol geranylgeranyltransferase (2.5.1.41)
- 205/01042 . . Geranylgeranylgeranol-phosphate geranylgeranyltransferase (2.5.1.42)
- 205/01043 . . Nicotianamine synthase (2.5.1.43)
- 205/01044 . . Homospermidine synthase (2.5.1.44)
- 205/01045 . . Homospermidine synthase (spermidine-specific) (2.5.1.45)
- 205/01046 . . Deoxyhypusine synthase (2.5.1.46)
- 205/01047 . . Cysteine synthase (2.5.1.47)
- 205/01048 . . Cystathionine gamma-synthase (2.5.1.48)
- 205/01049 . . O-acetylhomoserine aminocarboxypropyltransferase (2.5.1.49)
- 205/0105 . . Zeatin 9-aminocarboxyethyltransferase (2.5.1.50)
- 205/01051 . . Beta-pyrazolylalanine synthase (2.5.1.51)
- 205/01052 . . L-Mimosine synthase (2.5.1.52)
- 205/01053 . . Uracilylalanine synthase (2.5.1.53)
- 205/01054 . . 3-Deoxy-7-phosphoheptulonate synthase (2.5.1.54)
- 205/01055 . . 3-Deoxy-8-phosphooctulonate synthase (2.5.1.55)
- 205/01056 . . N-acetylneuraminate synthase (2.5.1.56)
- 205/01057 . . N-Acylneuraminate-9-phosphate synthase (2.5.1.57)
- 205/01058 . . Protein farnesyltransferase (2.5.1.58)
- 205/01059 . . Protein geranylgeranyltransferase type I (2.5.1.59)
- 205/0106 . . Protein geranylgeranyltransferase type II (2.5.1.60)
- 205/01061 . . Hydroxymethylbilane synthase (2.5.1.61)
- 205/01062 . . Chlorophyll synthase (2.5.1.62)
- 205/01063 . . Adenosyl-fluoride synthase (2.5.1.63)
- 205/01064 . . 2-Succinyl-6-hydroxy-2,4-cyclohexadiene-1-carboxylate synthase (2.5.1.64) ([C12Y 202/01009](#), [C12Y 402/9902 take precedence](#))
- 205/01065 . . O-Phosphoserine sulfhydrylase (2.5.1.65)
- 205/01066 . . N2-(2-Carboxyethyl)arginine synthase (2.5.1.66)
- 205/01067 . . Chrysanthemyl diphosphate synthase (2.5.1.67)
- 205/01068 . . (2Z,6E)-Farnesyl diphosphate synthase (2.5.1.68)
- 205/01069 . . Lavandulyl diphosphate synthase (2.5.1.69)
- 205/0107 . . Naringenin 8-dimethylallyltransferase (2.5.1.70)
- 205/01071 . . Leachianone-G 2"-dimethylallyltransferase (2.5.1.71)
- 205/01072 . . Quinolate synthase (2.5.1.72)
- 205/01073 . . O-Phospho-L-seryl-tRNA:Cys-tRNA synthase (2.5.1.73)
- 205/01074 . . 1,4-Dihydroxy-2-naphthoate polyprenyltransferase (2.5.1.74)
- 205/01075 . . tRNA dimethylallyltransferase (2.5.1.75)
- 205/01076 . . Cysteate synthase (2.5.1.76)
- 205/01077 . . 7,8-Didemethyl-8-hydroxy-5-deazariboflavin synthase (2.5.1.77)
- 205/01078 . . 6,7-Dimethyl-8-ribityllumazine synthase (2.5.1.78)
- 205/01079 . . Thermospermine synthase (2.5.1.79)
- 205/0108 . . 7-Dimethylallyltryptophan synthase (2.5.1.80)

205/01081	. . Geranylfarnesyl diphosphate synthase (2.5.1.81)	206/01021	. . D-Amino-acid transaminase (2.6.1.21), i.e. D-alanine aminotransferase/transaminase or D-aspartic aminotransferase/transaminase
205/01082	. . Hexaprenyl diphosphate synthase (geranylgeranyl-diphosphate specific)(2.5.1.82)	206/01022	. . (S)-3-Amino-2-methylpropionate transaminase (2.6.1.22)
205/01083	. . Hexaprenyl-diphosphate synthase ((2E,6E)-farnesyl-diphosphate specific)(2.5.1.83)	206/01023	. . 4-Hydroxyglutamate transaminase (2.6.1.23)
205/01084	. . All-trans-nonaprenyl-diphosphate synthase (geranyl-diphosphate specific)(2.5.1.84)	206/01024	. . Diiodotyrosine transaminase (2.6.1.24)
205/01085	. . All-trans-nonaprenyl-diphosphate synthase (geranylgeranyl-diphosphate specific)(2.5.1.85)	206/01026	. . Thyroid-hormone transaminase (2.6.1.26)
205/01086	. . Trans,polycis-decaprenyl diphosphate synthase (2.5.1.86)	206/01027	. . Tryptophan transaminase (2.6.1.27)
205/01087	. . Ditrans,polycis-polyprenyl diphosphate synthase ((2E,6E)-farnesyl diphosphate specific)(2.5.1.87)	206/01028	. . Tryptophan--phenylpyruvate transaminase (2.6.1.28)
205/01088	. . Trans,polycis-polyprenyl diphosphate synthase ((2Z,6E)-farnesyl diphosphate specific)(2.5.1.88)	206/01029	. . Diamine transaminase (2.6.1.29)
205/01089	. . Tritrans,polycis-undecaprenyl-diphosphate synthase (geranylgeranyl-diphosphate specific)(2.5.1.89)	206/0103	. . Pyridoxamine--pyruvate transaminase (2.6.1.30)
205/0109	. . All-trans-octaprenyl-diphosphate synthase (2.5.1.90)	206/01031	. . Pyridoxamine--oxaloacetate transaminase (2.6.1.31)
205/01091	. . All-trans-decaprenyl-diphosphate synthase (2.5.1.91)	206/01032	. . Valine--3-methyl-2-oxovalerate transaminase (2.6.1.32)
205/01092	. . (2Z,6Z)-Farnesyl diphosphate synthase (2.5.1.92)	206/01033	. . dTDP-4-amino-4,6-dideoxy-D-glucose transaminase (2.6.1.33)
205/01093	. . 4-Hydroxybenzoate geranyltransferase (2.5.1.93)	206/01034	. . UDP-2-acetamido-4-amino-2,4,6-trideoxyglucose transaminase (2.6.1.34)
205/01094	. . Adenosyl-chloride synthase (2.5.1.94)	206/01035	. . Glycine--oxaloacetate transaminase (2.6.1.35)
205/01095	. . Xanthan ketal pyruvate transferase (2.5.1.95)	206/01036	. . L-Lysine 6-transaminase (2.6.1.36)
205/01096	. . 4,4'-diapophytoene synthase (2.5.1.96)	206/01037	. . 2-Aminoethylphosphonate--pyruvate transaminase (2.6.1.37)
205/01097	. . Pseudaminic acid synthase (2.5.1.97)	206/01038	. . Histidine transaminase (2.6.1.38)
205/01098	. . Rhizobium leguminosarum exopolysaccharide glucosyl ketal-pyruvate-transferase (2.5.1.98)	206/01039	. . 2-Aminoadipate transaminase (2.6.1.39)
205/01099	. . All-trans-phytoene synthase (2.5.1.99)	206/0104	. . (R)-3-Amino-2-methylpropionate--pyruvate transaminase (2.6.1.40)
205/011	. . Fumigaclavine A dimethylallyltransferase (2.5.1.100)	206/01041	. . D-Methionine--pyruvate transaminase (2.6.1.41)
205/01101	. . N,N'-Diacetyllegionaminate synthase (2.5.1.101)	206/01042	. . Branched-chain-amino-acid transaminase (2.6.1.42)
205/01102	. . Geranyl-pyrophosphate--olivetolic acid geranyltransferase (2.5.1.102)	206/01043	. . Aminolevulinate transaminase (2.6.1.43)
205/01103	. . Presqualene diphosphate synthase (2.5.1.103)	206/01044	. . Alanine--glyoxylate transaminase (2.6.1.44)
<b>206/00</b>	<b>Transferases transferring nitrogenous groups (2.6)</b>	206/01045	. . Serine--glyoxylate transaminase (2.6.1.45)
206/01	. . Transaminases (2.6.1)	206/01046	. . Diaminobutyrate--pyruvate transaminase (2.6.1.46)
206/01001	. . Aspartate transaminase (2.6.1.1), i.e. aspartate-aminotransferase	206/01047	. . Alanine--oxomalonate transaminase (2.6.1.47)
206/01002	. . Alanine transaminase (2.6.1.2), i.e. alanine-aminotransferase	206/01048	. . 5-Aminovalerate transaminase (2.6.1.48)
206/01003	. . Cysteine transaminase (2.6.1.3)	206/01049	. . Dihydroxyphenylalanine transaminase (2.6.1.49)
206/01004	. . Glycine transaminase (2.6.1.4)	206/0105	. . Glutamine--scyllo-inositol transaminase (2.6.1.50)
206/01005	. . Tyrosine transaminase (2.6.1.5)	206/01051	. . Serine--pyruvate transaminase (2.6.1.51)
206/01006	. . Leucine transaminase (2.6.1.6)	206/01052	. . Phosphoserine transaminase (2.6.1.52)
206/01007	. . Kynurenine--oxoglutarate transaminase (2.6.1.7)	206/01054	. . Pyridoxamine-phosphate transaminase (2.6.1.54)
206/01008	. . 2,5-Diaminovalerate transaminase (2.6.1.8)	206/01055	. . Taurine--2-oxoglutarate transaminase (2.6.1.55)
206/01009	. . Histidinol-phosphate transaminase (2.6.1.9)	206/01056	. . 1D-1-Guanidino-3-amino-1,3-dideoxy-scyllo-inositol transaminase (2.6.1.56)
206/01011	. . Acetylornithine transaminase (2.6.1.11)	206/01057	. . Aromatic-amino-acid transaminase (2.6.1.57)
206/01012	. . Alanine--oxo-acid transaminase (2.6.1.12)	206/01058	. . Phenylalanine(histidine) transaminase (2.6.1.58)
206/01013	. . Ornithine aminotransferase (2.6.1.13)	206/01059	. . dTDP-4-amino-4,6-dideoxygalactose transaminase (2.6.1.59)
206/01014	. . Asparagine--oxo-acid transaminase (2.6.1.14)	206/0106	. . Aromatic-amino-acid--glyoxylate transaminase (2.6.1.60)
206/01015	. . Glutamine--pyruvate transaminase (2.6.1.15)	206/01062	. . Adenosylmethionine--8-amino-7-oxononanoate transaminase (2.6.1.62)
206/01016	. . Glutamine-fructose-6-phosphate transaminase (isomerizing) (2.6.1.16), i.e. glucosamine-6-phosphate-synthase	206/01063	. . Kynurenine--glyoxylate transaminase (2.6.1.63)
206/01017	. . Succinyldiaminopimelate transaminase (2.6.1.17)	206/01064	. . Glutamine-phenylpyruvate transaminase (2.6.1.64)
206/01018	. . Beta-alanine-pyruvate transaminase (2.6.1.18)	206/01065	. . N6-Acetyl-beta-lysine transaminase (2.6.1.65)
206/01019	. . 4-Aminobutyrate--2-oxoglutarate transaminase (2.6.1.19)	206/01066	. . Valine--pyruvate transaminase (2.6.1.66)
		206/01067	. . 2-Aminohexanoate transaminase (2.6.1.67)
		206/01068	. . Ornithine(lysine) transaminase (2.6.1.68)

206/0107	. . Aspartate--phenylpyruvate transaminase (2.6.1.70)	207/01012	. . Gluconokinase (2.7.1.12)
206/01071	. . Lysine--pyruvate 6-transaminase (2.6.1.71)	207/01013	. . Dehydrogluconokinase (2.7.1.13)
206/01072	. . D-4-Hydroxyphenylglycine transaminase (2.6.1.72)	207/01014	. . Sedoheptulokinase (2.7.1.14)
206/01073	. . Methionine--glyoxylate transaminase (2.6.1.73)	207/01015	. . Ribokinase (2.7.1.15)
206/01074	. . Cephalosporin-C transaminase (2.6.1.74)	207/01016	. . Ribulokinase (2.7.1.16)
206/01075	. . Cysteine-conjugate transaminase (2.6.1.75)	207/01017	. . Xylulokinase (2.7.1.17)
206/01076	. . Diaminobutyrate--2-oxoglutarate transaminase (2.6.1.76)	207/01018	. . Phosphoribokinase (2.7.1.18)
206/01077	. . Taurine--pyruvate aminotransferase (2.6.1.77)	207/01019	. . Phosphoribulokinase (2.7.1.19)
206/01078	. . Aspartate--prephenate aminotransferase (2.6.1.78)	207/0102	. . Adenosine kinase (2.7.1.20)
206/01079	. . Glutamate--prephenate aminotransferase (2.6.1.79)	207/01021	. . Thymidine kinase (2.7.1.21)
206/0108	. . Nicotianamine aminotransferase (2.6.1.80)	207/01022	. . Ribosylnicotinamide kinase (2.7.1.22)
206/01081	. . Succinylornithine transaminase (2.6.1.81)	207/01023	. . NAD <sup>+</sup> kinase (2.7.1.23)
206/01082	. . Putrescine aminotransferase (2.6.1.82)	207/01024	. . Dephospho-CoA kinase (2.7.1.24)
206/01083	. . LL-Diaminopimelate aminotransferase (2.6.1.83)	207/01025	. . Adenylyl-sulfate kinase (2.7.1.25)
206/01084	. . Arginine--pyruvate transaminase (2.6.1.84)	207/01026	. . Riboflavin kinase (2.7.1.26)
206/01085	. . Aminodeoxychorismate synthase (2.6.1.85)	207/01027	. . Erythritol kinase (2.7.1.27)
206/01086	. . 2-Amino-4-deoxychorismate synthase (2.6.1.86)	207/01028	. . Triokinase (2.7.1.28)
206/01087	. . UDP-4-amino-4-deoxy-L-arabinose aminotransferase (2.6.1.87)	207/01029	. . Glycerone kinase (2.7.1.29), i.e. dihydroxyacetone kinase
206/01088	. . Methionine transaminase (2.6.1.88)	207/0103	. . Glycerol kinase (2.7.1.30)
206/01089	. . dTDP-3-amino-3,6-dideoxy- $\alpha$ -D-glucopyranose transaminase (2.6.1.89)	207/01031	. . Glycerate kinase (2.7.1.31)
206/0109	. . dTDP-3-amino-3,6-dideoxy- $\alpha$ -D-galactopyranose transaminase (2.6.1.90)	207/01032	. . Choline kinase (2.7.1.32)
206/01091	. . UDP-4-amino-4,6-dideoxy- $\alpha$ -D-N-acetyl-D-glucosamine transaminase (2.6.1.91)	207/01033	. . Pantothenate kinase (2.7.1.33)
206/01092	. . UDP-4-amino-4,6-dideoxy-L-N-acetyl-beta-L-altrosamine transaminase (2.6.1.92)	207/01034	. . Pantetheine kinase (2.7.1.34)
206/01093	. . Neamine transaminase (2.6.1.93)	207/01035	. . Pyridoxal kinase (2.7.1.35)
206/01094	. . 2'-Deamino-2'-hydroxyneamine transaminase (2.6.1.94)	207/01036	. . Mevalonate kinase (2.7.1.36)
206/01095	. . Neomycin C transaminase (2.6.1.95)	207/01037	. . Protein kinase (2.7.1.37) ( <a href="#">C12Y 207/11001</a> , <a href="#">C12Y 207/11008</a> - <a href="#">C12Y 207/11013</a> , <a href="#">C12Y 207/11021</a> , <a href="#">C12Y 207/11022</a> , <a href="#">C12Y 207/11024</a> , <a href="#">C12Y 207/11025</a> , <a href="#">C12Y 207/1103</a> , <a href="#">C12Y 207/12001</a> take precedence)
206/01096	. . 4-Aminobutyrate--pyruvate transaminase (2.6.1.96)	207/01039	. . Homoserine kinase (2.7.1.39)
206/01097	. . Archaeosine synthase (2.6.1.97)	207/0104	. . Pyruvate kinase (2.7.1.40)
206/01098	. . UDP-2-acetamido-2-deoxy-ribo-hexuluronate aminotransferase (2.6.1.98)	207/01041	. . Glucose-1-phosphate phosphodismutase (2.7.1.41)
206/01099	. . L-Tryptophan--pyruvate aminotransferase (2.6.1.99)	207/01042	. . Riboflavin phosphotransferase (2.7.1.42)
206/03	. Oximinotransferases (2.6.3)	207/01043	. . Glucuronokinase (2.7.1.43)
206/03001	. . Oximinotransferase (2.6.3.1)	207/01044	. . Galacturonokinase (2.7.1.44)
206/99	. transferring other nitrogenous groups (2.6.99)	207/01045	. . 2-Dehydro-3-deoxygluconokinase (2.7.1.45)
206/99001	. . dATP(dGTP)--DNA purinetransferase (2.6.99.1)	207/01046	. . L-Arabinokinase (2.7.1.46)
206/99002	. . Pyridoxine 5'-phosphate synthase (2.6.99.2)	207/01047	. . D-Ribulokinase (2.7.1.47)
<b>207/00</b>	<b>Transferases transferring phosphorus-containing groups (2.7)</b>	207/01048	. . Uridine kinase (2.7.1.48)
207/01	. Phosphotransferases with an alcohol group as acceptor (2.7.1)	207/01049	. . Hydroxymethylpyrimidine kinase (2.7.1.49)
207/01001	. . Hexokinase (2.7.1.1)	207/0105	. . Hydroxyethylthiazole kinase (2.7.1.50)
207/01002	. . Glucokinase (2.7.1.2)	207/01051	. . L-Fuculokinase (2.7.1.51)
207/01003	. . Ketohexokinase (2.7.1.3)	207/01052	. . Fucokinase (2.7.1.52)
207/01004	. . Fructokinase (2.7.1.4)	207/01053	. . L-Xylulokinase (2.7.1.53)
207/01005	. . Rhamnulokinase (2.7.1.5)	207/01054	. . D-Arabinokinase (2.7.1.54)
207/01006	. . Galactokinase (2.7.1.6)	207/01055	. . Allose kinase (2.7.1.55)
207/01007	. . Mannokinase (2.7.1.7)	207/01056	. . 1-Phosphofructokinase (2.7.1.56)
207/01008	. . Glucosamine kinase (2.7.1.8)	207/01058	. . 2-Dehydro-3-deoxygalactonokinase (2.7.1.58)
207/0101	. . Phosphoglucokinase (2.7.1.10)	207/01059	. . N-Acetylglucosamine kinase (2.7.1.59)
207/01011	. . 6-Phosphofructokinase (2.7.1.11)	207/0106	. . N-Acylmannosamine kinase (2.7.1.60)
		207/01061	. . Acyl-phosphate--hexose phosphotransferase (2.7.1.61)
		207/01062	. . Phosphoramidate--hexose phosphotransferase (2.7.1.62)
		207/01063	. . Polyphosphate--glucose phosphotransferase (2.7.1.63)
		207/01064	. . Inositol 3-kinase (2.7.1.64)
		207/01065	. . Scyllo-inosamine 4-kinase (2.7.1.65)



207/01066	. . Undecaprenol kinase (2.7.1.66)	207/01142	. . Glycerol-3-phosphate--glucose phosphotransferase (2.7.1.142)
207/01067	. . 1-Phosphatidylinositol 4-kinase (2.7.1.67)	207/01143	. . Diphosphate-purine nucleoside kinase (2.7.1.143)
207/01068	. . 1-Phosphatidylinositol-4-phosphate 5-kinase (2.7.1.68)	207/01144	. . Tagatose-6-phosphate kinase (2.7.1.144)
207/01069	. . Protein-Npi-phosphohistidine-sugar phosphotransferase (2.7.1.69), i.e. sucrose phosphotransferase system II	207/01145	. . Deoxynucleoside kinase (2.7.1.145)
207/01071	. . Shikimate kinase (2.7.1.71)	207/01146	. . ADP-specific phosphofructokinase (2.7.1.146)
207/01072	. . Streptomycin 6-kinase (2.7.1.72)	207/01147	. . ADP-specific glucokinase (2.7.1.147)
207/01073	. . Inosine kinase (2.7.1.73)	207/01148	. . 4-(Cytidine 5'-diphospho)-2-C-methyl-D-erythritol kinase (2.7.1.148)
207/01074	. . Deoxycytidine kinase (2.7.1.74)	207/01149	. . 1-Phosphatidylinositol-5-phosphate 4-kinase (2.7.1.149)
207/01076	. . Deoxyadenosine kinase (2.7.1.76)	207/0115	. . 1-Phosphatidylinositol-3-phosphate 5-kinase (2.7.1.150)
207/01077	. . Nucleoside phosphotransferase (2.7.1.77)	207/01151	. . Inositol-polyphosphate multikinase (2.7.1.151)
207/01078	. . Polynucleotide 5'-hydroxyl-kinase (2.7.1.78)	207/01153	. . Phosphatidylinositol-4,5-bisphosphate 3-kinase (2.7.1.153), i.e. phosphoinositide 3-kinase
207/01079	. . Diphosphate--glycerol phosphotransferase (2.7.1.79)	207/01154	. . Phosphatidylinositol-4-phosphate 3-kinase (2.7.1.154)
207/0108	. . Diphosphate--serine phosphotransferase (2.7.1.80)	207/01156	. . Adenosylcobinamide kinase (2.7.1.156)
207/01081	. . Hydroxylysine kinase (2.7.1.81)	207/01157	. . N-Acetylgalactosamine kinase (2.7.1.157)
207/01082	. . Ethanolamine kinase (2.7.1.82)	207/01158	. . Inositol-pentakisphosphate 2-kinase (2.7.1.158)
207/01083	. . Pseudouridine kinase (2.7.1.83)	207/01159	. . Inositol-1,3,4-trisphosphate 5/6-kinase (2.7.1.159)
207/01084	. . Alkylglycerone kinase (2.7.1.84)	207/0116	. . 2'-Phosphotransferase (2.7.1.160)
207/01085	. . Beta-glucoside kinase (2.7.1.85)	207/01161	. . CTP-dependent riboflavin kinase (2.7.1.161)
207/01086	. . NADH kinase (2.7.1.86)	207/01162	. . N-Acetylhexosamine 1-kinase (2.7.1.162)
207/01087	. . Streptomycin 3"-kinase (2.7.1.87)	207/01163	. . Hygromycin B 4-O-kinase (2.7.1.163)
207/01088	. . Dihydrostreptomycin-6-phosphate 3'-alpha-kinase (2.7.1.88)	207/01164	. . O-Phosphoserine-tRNA(Sec) kinase (2.7.1.164)
207/01089	. . Thiamine kinase (2.7.1.89)	207/01165	. . Glycerate 2-kinase (2.7.1.165)
207/0109	. . Diphosphate--fructose-6-phosphate 1-phosphotransferase (2.7.1.90)	207/01166	. . 3-Deoxy-D-manno-octulosonic acid kinase (2.7.1.166)
207/01091	. . Sphinganine kinase (2.7.1.91)	207/01167	. . D-Glycero-beta-D-manno-heptose-7-phosphate kinase (2.7.1.167)
207/01092	. . 5-Dehydro-2-deoxygluconokinase (2.7.1.92)	207/01168	. . D-Glycero-alpha-D-manno-heptose-7-phosphate kinase (2.7.1.168)
207/01093	. . Alkylglycerol kinase (2.7.1.93)	207/01169	. . Pantoate kinase (2.7.1.169)
207/01094	. . Acylglycerol kinase (2.7.1.94)	207/0117	. . Anhydro-N-acetylmuramic acid kinase (2.7.1.170)
207/01095	. . Kanamycin kinase (2.7.1.95), i.e. neomycin-kanamycin phosphotransferase	207/01171	. . Protein-fructosamine 3-kinase (2.7.1.171)
207/011	. . S-Methyl-5-thioribose kinase (2.7.1.100)	207/01172	. . Protein-ribulosamine 3-kinase (2.7.1.172)
207/01101	. . Tagatose kinase (2.7.1.101)	207/01173	. . Nicotinate riboside kinase (2.7.1.173)
207/01102	. . Hamamelose kinase (2.7.1.102)	207/01174	. . Diacylglycerol kinase (CTP dependent) (2.7.1.174)
207/01103	. . Viomycin kinase (2.7.1.103)	207/01175	. . Maltokinase (2.7.1.175)
207/01105	. . 6-Phosphofructo-2-kinase (2.7.1.105)	207/01176	. . UDP-N-acetylglucosamine kinase (2.7.1.176)
207/01106	. . Glucose-1,6-bisphosphate synthase (2.7.1.106)	207/01177	. . L-Threonine kinase (2.7.1.177)
207/01107	. . Diacylglycerol kinase (2.7.1.107)	207/02	. . Phosphotransferases with a carboxy group as acceptor (2.7.2)
207/01108	. . Dolichol kinase (2.7.1.108)	207/02001	. . Acetate kinase (2.7.2.1)
207/01112	. . Protein-tyrosine kinase (2.7.1.112) ( <a href="#">C12Y 207/10001</a> , <a href="#">C12Y 207/10002</a> take precedence)	207/02002	. . Carbamate kinase (2.7.2.2)
207/01113	. . Deoxyguanosine kinase (2.7.1.113)	207/02003	. . Phosphoglycerate kinase (2.7.2.3)
207/01114	. . AMP--thymidine kinase (2.7.1.114)	207/02004	. . Aspartate kinase (2.7.2.4)
207/01118	. . ADP--thymidine kinase (2.7.1.118)	207/02006	. . Formate kinase (2.7.2.6)
207/01119	. . Hygromycin-B 7"-O-kinase (2.7.1.119)	207/02007	. . Butyrate kinase (2.7.2.7)
207/01121	. . Phosphoenolpyruvate--glycerone phosphotransferase (2.7.1.121)	207/02008	. . Acetylglutamate kinase (2.7.2.8)
207/01122	. . Xylitol kinase (2.7.1.122)	207/0201	. . Phosphoglycerate kinase (GTP) (2.7.2.10)
207/01127	. . Inositol-trisphosphate 3-kinase (2.7.1.127)	207/02011	. . Glutamate 5-kinase (2.7.2.11)
207/0113	. . Tetraacyldisaccharide 4'-kinase (2.7.1.130)	207/02012	. . Acetate kinase (diphosphate) (2.7.2.12)
207/01134	. . Inositol-tetrakisphosphate 1-kinase (2.7.1.134)	207/02013	. . Glutamate 1-kinase (2.7.2.13)
207/01136	. . Macrolide 2'-kinase (2.7.1.136)	207/02014	. . Branched-chain-fatty-acid kinase (2.7.2.14)
207/01137	. . Phosphatidylinositol 3-kinase (2.7.1.137)	207/02015	. . Propionate kinase (2.7.2.15)
207/01138	. . Ceramide kinase (2.7.1.138)	207/03	. . Phosphotransferases with a nitrogenous group as acceptor (2.7.3)
207/0114	. . Inositol-tetrakisphosphate 5-kinase (2.7.1.140)		

207/03001	. . Guanidinoacetate kinase (2.7.3.1)	207/07004	. . Sulfate adenylyltransferase (2.7.7.4)
207/03002	. . Creatine kinase (2.7.3.2)	207/07005	. . Sulfate adenylyltransferase (ADP) (2.7.7.5)
207/03003	. . Arginine kinase (2.7.3.3)	207/07006	. . DNA-directed RNA polymerase (2.7.7.6)
207/03004	. . Taurocyamine kinase (2.7.3.4)	207/07007	. . DNA-directed DNA polymerase (2.7.7.7), i.e. DNA replicase
207/03005	. . Lombricine kinase (2.7.3.5)	207/07008	. . Polyribonucleotide nucleotidyltransferase (2.7.7.8), i.e. polynucleotide phosphorylase
207/03006	. . Hypotaurocyamine kinase (2.7.3.6)	207/07009	. . UTP-glucose-1-phosphate uridylyltransferase (2.7.7.9), i.e. UDP-glucose-pyrophosphorylase
207/03007	. . Opheline kinase (2.7.3.7)	207/0701	. . UTP--hexose-1-phosphate uridylyltransferase (2.7.7.10)
207/03008	. . Ammonia kinase (2.7.3.8)	207/07011	. . UTP--xylose-1-phosphate uridylyltransferase (2.7.7.11)
207/03009	. . Phosphoenolpyruvate-protein phosphotransferase (2.7.3.9)	207/07012	. . UDP-glucose--hexose-1-phosphate uridylyltransferase (2.7.7.12)
207/0301	. . Agmatine kinase (2.7.3.10)	207/07013	. . Mannose-1-phosphate guanylyltransferase (2.7.7.13)
207/04	. . Phosphotransferases with a phosphate group as acceptor (2.7.4)	207/07014	. . Ethanolamine-phosphate cytidylyltransferase (2.7.7.14)
207/04001	. . Polyphosphate kinase (2.7.4.1)	207/07015	. . Choline-phosphate cytidylyltransferase (2.7.7.15)
207/04002	. . Phosphomevalonate kinase (2.7.4.2)	207/07018	. . Nicotinate-nucleotide adenylyltransferase (2.7.7.18)
207/04003	. . Adenylate kinase (2.7.4.3)	207/07019	. . Polynucleotide adenylyltransferase (2.7.7.19)
207/04004	. . Nucleoside-phosphate kinase (2.7.4.4)	207/07022	. . Mannose-1-phosphate guanylyltransferase (GDP) (2.7.7.22)
207/04006	. . Nucleoside-diphosphate kinase (2.7.4.6)	207/07023	. . UDP-N-acetylglucosamine diphosphorylase (2.7.7.23)
207/04007	. . Phosphomethylpyrimidine kinase (2.7.4.7)	207/07024	. . Glucose-1-phosphate thymidylyltransferase (2.7.7.24)
207/04008	. . Guanylate kinase (2.7.4.8)	207/07027	. . Glucose-1-phosphate adenylyltransferase (2.7.7.27), i.e. ADP-glucose pyrophosphorylase
207/04009	. . dTMP kinase (2.7.4.9)	207/07028	. . Nucleoside-triphosphate-aldose-1-phosphate nucleotidyltransferase (2.7.7.28)
207/0401	. . Nucleoside-triphosphate--adenylate kinase (2.7.4.10)	207/0703	. . Fucose-1-phosphate guanylyltransferase (2.7.7.30)
207/04011	. . (Deoxy)adenylate kinase (2.7.4.11)	207/07031	. . DNA nucleotidylexotransferase (2.7.7.31), i.e. terminal deoxynucleotidyl transferase
207/04012	. . T(2)-Induced deoxynucleotide kinase (2.7.4.12)	207/07032	. . Galactose-1-phosphate thymidylyltransferase (2.7.7.32)
207/04013	. . (Deoxy)nucleoside-phosphate kinase (2.7.4.13)	207/07033	. . Glucose-1-phosphate cytidylyltransferase (2.7.7.33)
207/04014	. . UMP/CMP kinase (2.7.4.14), i.e. uridine monophosphate kinase	207/07034	. . Glucose-1-phosphate guanylyltransferase (2.7.7.34)
207/04015	. . Thiamine-diphosphate kinase (2.7.4.15)	207/07035	. . Ribose-5-phosphate adenylyltransferase (2.7.7.35)
207/04016	. . Thiamine-phosphate kinase (2.7.4.16)	207/07036	. . Aldose-1-phosphate adenylyltransferase (2.7.7.36)
207/04017	. . 3-Phosphoglyceroyl-phosphate--polyphosphate phosphotransferase (2.7.4.17)	207/07037	. . Aldose-1-phosphate nucleotidyltransferase (2.7.7.37)
207/04018	. . Farnesyl-diphosphate kinase (2.7.4.18)	207/07038	. . 3-Deoxy-manno-octulosonate cytidylyltransferase (2.7.7.38)
207/04019	. . 5-Methyldeoxycytidine-5'-phosphate kinase (2.7.4.19)	207/07039	. . Glycerol-3-phosphate cytidylyltransferase (2.7.7.39)
207/0402	. . Dolichyl-diphosphate--polyphosphate phosphotransferase (2.7.4.20)	207/0704	. . D-Ribitol-5-phosphate cytidylyltransferase (2.7.7.40)
207/04021	. . Inositol-hexakisphosphate kinase (2.7.4.21)	207/07041	. . Phosphatidate cytidylyltransferase (2.7.7.41), i.e. CDP-diacylglycerol synthase
207/04022	. . UMP kinase (2.7.4.22)	207/07042	. . [Glutamate--ammonia-ligase] adenylyltransferase (2.7.7.42)
207/04023	. . Ribose 1,5-bisphosphate phosphokinase (2.7.4.23)	207/07043	. . N-Acylneuraminate cytidylyltransferase (2.7.7.43)
207/04024	. . Diphosphoinositol-pentakisphosphate kinase (2.7.4.24)	207/07044	. . Glucuronate-1-phosphate uridylyltransferase (2.7.7.44)
207/04025	. . (d)CMP kinase (2.7.4.25)		
207/04026	. . Isopentenyl phosphate kinase (2.7.4.26)		
207/04027	. . [Pyruvate, phosphate dikinase]-phosphate phosphotransferase (2.7.4.27)		
207/04028	. . [Pyruvate, water dikinase]-phosphate phosphotransferase (2.7.4.28)		
207/06	. . Diphosphotransferases (2.7.6)		
207/06001	. . Ribose-phosphate diphosphokinase (2.7.6.1)		
207/06002	. . Thiamine diphosphokinase (2.7.6.2)		
207/06003	. . 2-Amino-4-hydroxy-6-hydroxymethyldihydropteridine diphosphokinase (2.7.6.3)		
207/06004	. . Nucleotide diphosphokinase (2.7.6.4)		
207/06005	. . GTP diphosphokinase (2.7.6.5)		
207/07	. . Nucleotidyltransferases (2.7.7)		
207/07001	. . Nicotinamide-nucleotide adenylyltransferase (2.7.7.1)		
207/07002	. . FAD synthetase (2.7.7.2)		
207/07003	. . Pantetheine-phosphate adenylyltransferase (2.7.7.3)		

207/07045	. . Guanosine-triphosphate guanylyltransferase (2.7.7.45)	207/08002	. . Diacylglycerol cholinephosphotransferase (2.7.8.2)
207/07046	. . Gentamicin 2"-nucleotidyltransferase (2.7.7.46)	207/08003	. . Ceramide cholinephosphotransferase (2.7.8.3)
207/07047	. . Streptomycin 3"-adenylyltransferase (2.7.7.47)	207/08004	. . Serine-phosphoethanolamine synthase (2.7.8.4)
207/07048	. . RNA-directed RNA polymerase (2.7.7.48), i.e. RNA replicase	207/08005	. . CDP-diacylglycerol-glycerol-3-phosphate 3-phosphatidyltransferase (2.7.8.5)
207/07049	. . RNA-directed DNA polymerase (2.7.7.49), i.e. telomerase or reverse-transcriptase	207/08006	. . Undecaprenyl-phosphate galactose phosphotransferase (2.7.8.6)
207/0705	. . mRNA guanylyltransferase (2.7.7.50)	207/08007	. . Holo-[acyl-carrier-protein] synthase (2.7.8.7)
207/07051	. . Adenylylsulfate--ammonia adenylyltransferase (2.7.7.51)	207/08008	. . CDP-diacylglycerol--serine O-phosphatidyltransferase (2.7.8.8)
207/07052	. . RNA uridylyltransferase (2.7.7.52)	207/08009	. . Phosphomannan mannosephosphotransferase (2.7.8.9)
207/07053	. . ATP adenylyltransferase (2.7.7.53)	207/0801	. . Sphingosine cholinephosphotransferase (2.7.8.10)
207/07054	. . Phenylalanine adenylyltransferase (2.7.7.54)	207/08011	. . CDP-diacylglycerol--inositol 3-phosphatidyltransferase (2.7.8.11)
207/07055	. . Anthranilate adenylyltransferase (2.7.7.55)	207/08012	. . CDP-glycerol glycerophosphotransferase (2.7.8.12)
207/07056	. . tRNA nucleotidyltransferase (2.7.7.56)	207/08013	. . Phospho-N-acetylmuramoyl-pentapeptide-transferase (2.7.8.13)
207/07057	. . N-Methylphosphoethanolamine cytidylyltransferase (2.7.7.57)	207/08014	. . CDP-ribitol ribitolphosphotransferase (2.7.8.14)
207/07058	. . (2,3-Dihydroxybenzoyl)adenylate synthase (2.7.7.58)	207/08015	. . UDP-N-acetylglucosamine--dolichyl-phosphate N-acetylglucosaminephosphotransferase (2.7.8.15)
207/07059	. . [Protein-PII] uridylyltransferase (2.7.7.59)	207/08017	. . UDP-N-acetylglucosamine--lysosomal-enzyme N-acetylglucosaminephosphotransferase (2.7.8.17)
207/0706	. . 2-C-Methyl-D-erythritol 4-phosphate cytidylyltransferase (2.7.7.60)	207/08018	. . UDP-galactose--UDP-N-acetylglucosamine galactose phosphotransferase (2.7.8.18)
207/07061	. . Citrate lyase holo-[acyl-carrier-protein] synthase (2.7.7.61)	207/08019	. . UDP-glucose--glycoprotein glucose phosphotransferase (2.7.8.19)
207/07062	. . Adenosylcobinamide-phosphate guanylyltransferase (2.7.7.62)	207/0802	. . Phosphatidylglycerol--membrane-oligosaccharide glycerophosphotransferase (2.7.8.20)
207/07063	. . Lipoate--protein ligase (2.7.7.63)	207/08021	. . Membrane-oligosaccharide glycerophosphotransferase (2.7.8.21)
207/07064	. . UTP-monosaccharide-1-phosphate uridylyltransferase (2.7.7.64)	207/08022	. . 1-Alkenyl-2-acylglycerol choline phosphotransferase (2.7.8.22)
207/07065	. . Diguanylate cyclase (2.7.7.65)	207/08023	. . Carboxyvinyl-carboxyphosphonate phosphorylmutase (2.7.8.23)
207/07066	. . Malonate decarboxylase holo-[acyl-carrier-protein] synthase (2.7.7.66)	207/08024	. . Phosphatidylcholine synthase (2.7.8.24)
207/07067	. . CDP-archaeol synthase (2.7.7.67)	207/08025	. . Triphosphoribosyl-dephospho-CoA synthase (2.7.8.25)
207/07068	. . 2-Phospho-L-lactate guanylyltransferase (2.7.7.68)	207/08026	. . Adenosylcobinamide-GDP ribazoletransferase (2.7.8.26)
207/07069	. . GDP-L-galactose phosphorylase (2.7.7.69)	207/08027	. . Sphingomyelin synthase (2.7.8.27)
207/0707	. . D-Glycero-beta-D-manno-heptose 1-phosphate adenylyltransferase (2.7.7.70)	207/08028	. . 2-Phospho-L-lactate transferase (2.7.8.28)
207/07071	. . D-Glycero-alpha-D-manno-heptose 1-phosphate guanylyltransferase (2.7.7.71)	207/08029	. . L-Serine-phosphatidylethanolamine phosphatidyltransferase (2.7.8.29)
207/07072	. . CCA tRNA nucleotidyltransferase (2.7.7.72)	207/0803	. . Undecaprenyl-phosphate 4-deoxy-4-formamido-L-arabinose transferase (2.7.8.30)
207/07073	. . Sulfur carrier protein ThiS adenylyltransferase (2.7.7.73)	207/08031	. . Undecaprenyl-phosphate glucose phosphotransferase (2.7.8.31)
207/07074	. . 1L-Myo-inositol 1-phosphate cytidylyltransferase (2.7.7.74)	207/08032	. . 3-O-Alpha-D-mannopyranosyl-alpha-D-mannopyranose xylosylphosphotransferase (2.7.8.32)
207/07075	. . Molybdopterin adenylyltransferase (2.7.7.75)	207/08033	. . UDP-GlcNAc:undecaprenyl-phosphate GlcNAc-1-phosphate transferase (2.7.8.33)
207/07076	. . Molybdenum cofactor cytidylyltransferase (2.7.7.76)	207/08034	. . CDP-L-myo-inositol myo-inositolphosphotransferase (2.7.8.34)
207/07077	. . Molybdenum cofactor guanylyltransferase (2.7.7.77)	207/08035	. . UDP-N-acetylglucosamine—decaprenyl-phosphate N-acetylglucosaminephosphotransferase (2.7.8.35)
207/07078	. . GDP-D-glucose phosphorylase (2.7.7.78)		
207/07079	. . tRNA(His) guanylyltransferase (2.7.7.79)		
207/0708	. . Molybdopterin-synthase adenylyltransferase (2.7.7.80)		
207/07081	. . Pseudaminic acid cytidylyltransferase (2.7.7.81)		
207/07082	. . CMP-N,N'-diacetyllegionaminic acid synthase (2.7.7.82)		
207/07083	. . UDP-N-acetylgalactosamine diphosphorylase (2.7.7.83)		
207/08	. . Transferases for other substituted phosphate groups (2.7.8)		
207/08001	. . Ethanolaminephosphotransferase (2.7.8.1)		

- 207/08036 . . Undecaprenyl phosphate N,N'-diacetyl bacillosamine 1-phosphate transferase (2.7.8.36)
- 207/08037 . . Alpha-D-ribose 1-methylphosphonate 5-triphosphate synthase (2.7.8.37)
- 207/09 . . Phosphotransferases with paired acceptors (2.7.9)
- 207/09001 . . Pyruvate, phosphate dikinase (2.7.9.1)
- 207/09002 . . Pyruvate, water dikinase (2.7.9.2)
- 207/09003 . . Selenide, water dikinase (2.7.9.3), i.e. selenophosphate-synthase
- 207/09004 . . Alpha-glucan, water dikinase (2.7.9.4)
- 207/09005 . . Phosphoglucan, water dikinase (2.7.9.5)
- 207/10 . . Protein-tyrosine kinases (2.7.10)
- 207/10001 . . Receptor protein-tyrosine kinase (2.7.10.1)
- 207/10002 . . Non-specific protein-tyrosine kinase (2.7.10.2), i.e. spleen tyrosine kinase
- 207/11 . . Protein-serine/threonine kinases (2.7.11)
- 207/11001 . . Non-specific serine/threonine protein kinase (2.7.11.1), i.e. casein kinase or checkpoint kinase
- 207/11002 . . [Pyruvate dehydrogenase (acetyl-transferring)] kinase (2.7.11.2)
- 207/11003 . . Dephospho-[reductase kinase] kinase (2.7.11.3)
- 207/11004 . . [3-Methyl-2-oxobutanoate dehydrogenase (acetyl-transferring)] kinase (2.7.11.4)
- 207/11005 . . [Isocitrate dehydrogenase (NADP+)] kinase (2.7.11.5)
- 207/11006 . . [Tyrosine 3-monooxygenase] kinase (2.7.11.6)
- 207/11007 . . [Myosin-heavy-chain] kinase (2.7.11.7)
- 207/11008 . . Fas-activated serine/threonine kinase (2.7.11.8)
- 207/11009 . . Goodpasture-antigen-binding protein kinase (2.7.11.9)
- 207/1101 . . IkappaB kinase (2.7.11.10)
- 207/11011 . . cAMP-dependent protein kinase (2.7.11.11)
- 207/11012 . . cGMP-dependent protein kinase (2.7.11.12)
- 207/11013 . . Protein kinase C (2.7.11.13)
- 207/11014 . . Rhodopsin kinase (2.7.11.14)
- 207/11015 . . [Beta-adrenergic-receptor] kinase (2.7.11.15)
- 207/11016 . . G-Protein-coupled receptor kinase (2.7.11.16)
- 207/11017 . . Ca<sup>2+</sup>/Calmodulin-dependent protein kinase (2.7.11.17)
- 207/11018 . . Myosin-light-chain kinase (2.7.11.18)
- 207/11019 . . Phosphorylase kinase (2.7.11.19)
- 207/1102 . . Elongation factor 2 kinase (2.7.11.20), i.e. eEF-2K
- 207/11021 . . Polo kinase (2.7.11.21)
- 207/11022 . . Cyclin-dependent kinase (2.7.11.22)
- 207/11023 . . [RNA-polymerase-subunit] kinase (2.7.11.23)
- 207/11024 . . Mitogen-activated protein kinase (2.7.11.24), i.e. MAPK or MAPK2 or c-Jun N-terminal kinase
- 207/11025 . . Mitogen-activated protein kinase kinase kinase (2.7.11.25), i.e. MAPKKK or MAP3K
- 207/11026 . . Tau-protein kinase (2.7.11.26)
- 207/11027 . . [Acetyl-CoA carboxylase] kinase (2.7.11.27)
- 207/11028 . . Tropomyosin kinase (2.7.11.28)
- 207/11029 . . [Low-density-lipoprotein receptor] kinase (2.7.11.29)
- 207/1103 . . Receptor protein serine/threonine kinase (2.7.11.30)
- 207/11031 . . [Hydroxymethylglutaryl-CoA reductase (NADPH)] kinase (2.7.11.31)
- 207/11032 . . [Pyruvate, phosphate dikinase] kinase (2.7.11.32)
- 207/11033 . . [Pyruvate, water dikinase] kinase (2.7.11.33)
- 207/12 . . Dual-specificity kinases (2.7.12)
- 207/12001 . . Dual-specificity kinase (2.7.12.1)
- 207/12002 . . Mitogen-activated protein kinase kinase (2.7.12.2), i.e. MAPKK or MEK1 or MEK2
- 207/13 . . Protein-histidine kinases (2.7.13)
- 207/13001 . . Protein-histidine pros-kinase (2.7.13.1)
- 207/13002 . . Protein-histidine tele-kinase (2.7.13.2)
- 207/13003 . . Histidine kinase (2.7.13.3)
- 207/99 . . Other protein kinases (2.7.99)
- 207/99001 . . Triphosphate--protein phosphotransferase (2.7.99.1)
- 208/00      Transferases transferring sulfur-containing groups (2.8)**
- 208/01 . . Sulfurtransferases (2.8.1)
- 208/01001 . . Thiosulfate sulfurtransferase (2.8.1.1)
- 208/01002 . . 3-Mercaptopyruvate sulfurtransferase (2.8.1.2)
- 208/01003 . . Thiosulfate--thiol sulfurtransferase (2.8.1.3)
- 208/01004 . . tRNA sulfurtransferase (2.8.1.4)
- 208/01005 . . Thiosulfate--dithiol sulfurtransferase (2.8.1.5)
- 208/01006 . . Biotin synthase (2.8.1.6)
- 208/01007 . . Cysteine desulfurase (2.8.1.7)
- 208/01008 . . Lipoyl synthase (2.8.1.8)
- 208/01009 . . Molybdenum cofactor sulfurtransferase (2.8.1.9)
- 208/0101 . . Thiazole synthase (2.8.1.10)
- 208/01011 . . Molybdopterin synthase sulfurtransferase (2.8.1.11)
- 208/01012 . . Molybdopterin synthase (2.8.1.12)
- 208/02 . . Sulfotransferases (2.8.2)
- 208/02001 . . Aryl sulfotransferase (2.8.2.1)
- 208/02002 . . Alcohol sulfotransferase (2.8.2.2)
- 208/02003 . . Amine sulfotransferase (2.8.2.3)
- 208/02004 . . Estrone sulfotransferase (2.8.2.4)
- 208/02005 . . Chondroitin 4-sulfotransferase (2.8.2.5)
- 208/02006 . . Choline sulfotransferase (2.8.2.6)
- 208/02007 . . UDP-N-acetylgalactosamine-4-sulfate sulfotransferase (2.8.2.7)
- 208/02008 . . [Heparan sulfate]-glucosamine N-sulfotransferase (2.8.2.8)
- 208/02009 . . Tyrosine-ester sulfotransferase (2.8.2.9)
- 208/0201 . . Renilla-luciferin sulfotransferase (2.8.2.10)
- 208/02011 . . Galactosylceramide sulfotransferase (2.8.2.11)
- 208/02013 . . Psychosine sulfotransferase (2.8.2.13)
- 208/02014 . . Bile-salt sulfotransferase (2.8.2.14)
- 208/02015 . . Steroid sulfotransferase (2.8.2.15)
- 208/02016 . . Thiol sulfotransferase (2.8.2.16)
- 208/02017 . . Chondroitin 6-sulfotransferase (2.8.2.17)
- 208/02018 . . Cortisol sulfotransferase (2.8.2.18)
- 208/02019 . . Triglucoylalkylacylglycerol sulfotransferase (2.8.2.19)
- 208/0202 . . Protein-tyrosine sulfotransferase (2.8.2.20)
- 208/02021 . . Keratan sulfotransferase (2.8.2.21)
- 208/02022 . . Aryl-sulfate sulfotransferase (2.8.2.22)
- 208/02023 . . [Heparan sulfate]-glucosamine 3-sulfotransferase 1 (2.8.2.23)
- 208/02024 . . Desulfoglucosinolate sulfotransferase (2.8.2.24)
- 208/02025 . . Flavonol 3-sulfotransferase (2.8.2.25)
- 208/02026 . . Quercetin-3-sulfate 3'-sulfotransferase (2.8.2.26)
- 208/02027 . . Quercetin-3-sulfate 4'-sulfotransferase (2.8.2.27)
- 208/02028 . . Quercetin-3,3'-bissulfate 7-sulfotransferase (2.8.2.28)
- 208/02029 . . [Heparan sulfate]-glucosamine 3-sulfotransferase 2 (2.8.2.29)

- 208/0203 . . [Heparan sulfate]-glucosamine 3-sulfotransferase 3 (2.8.2.30)
- 208/02031 . . Petromyzonol sulfotransferase (2.8.2.31)
- 208/02032 . . Scymnol sulfotransferase (2.8.2.32)
- 208/02033 . . N-Acetylgalactosamine 4-sulfate 6-O-sulfotransferase (2.8.2.33)
- 208/02034 . . Glycochenodeoxycholate sulfotransferase (2.8.2.34)
- 208/02035 . . Dermatan 4-sulfotransferase (2.8.2.35)
- 208/03 . . CoA-transferases (2.8.3)
- 208/03001 . . Propionate CoA-transferase (2.8.3.1)
- 208/03002 . . Oxalate CoA-transferase (2.8.3.2)
- 208/03003 . . Malonate CoA-transferase (2.8.3.3)
- 208/03005 . . 3-Oxoacid CoA-transferase (2.8.3.5)
- 208/03006 . . 3-Oxoadipate CoA-transferase (2.8.3.6)
- 208/03007 . . Succinate--citramalate CoA-transferase (2.8.3.7)
- 208/03008 . . Acetate CoA-transferase (2.8.3.8)
- 208/03009 . . Butyrate--acetoacetate CoA-transferase (2.8.3.9)
- 208/0301 . . Citrate CoA-transferase (2.8.3.10)
- 208/03011 . . Citramalate CoA-transferase (2.8.3.11)
- 208/03012 . . Glutaconate CoA-transferase (2.8.3.12)
- 208/03013 . . Succinate--hydroxymethylglutarate CoA-transferase (2.8.3.13)
- 208/03014 . . 5-Hydroxypentanoate CoA-transferase (2.8.3.14)
- 208/03015 . . Succinyl-CoA:(R)-benzylsuccinate CoA-transferase (2.8.3.15)
- 208/03016 . . Formyl-CoA transferase (2.8.3.16)
- 208/03017 . . Cinnamoyl-CoA:phenyllactate CoA-transferase (2.8.3.17)
- 208/04 . . transferring alkylthio groups (2.8.4)
- 208/04001 . . Coenzyme-B sulfoethylthiotransferase (2.8.4.1)
- 208/04002 . . Arsenate-mycothioli transferase (2.8.4.2)
- 209/00      Transferases transferring selenium-containing groups (2.9)**
- 209/01 . . transferring selenium-containing groups (2.9.1)
- 209/01001 . . L-Seryl-tRNA(Sec) selenium transferase (2.9.1.1)
- 209/01002 . . O-Phospho-L-seryl-tRNA(Sec):L-selenocysteinyl-tRNA synthase (2.9.1.2)
- 210/00      Transferases transferring molybdenum- or tungsten-containing groups (2.10)**
- 210/01 . . Molybdenumtransferases or tungstenttransferases with sulfide groups as acceptors (2.10.1)
- 210/01001 . . Molybdopterin molybdotransferase (2.10.1.1)
- 301/00      Hydrolases acting on ester bonds (3.1)**
- 301/01 . . Carboxylic ester hydrolases (3.1.1)
- 301/01001 . . Carboxylesterase (3.1.1.1)
- 301/01002 . . Arylesterase (3.1.1.2)
- 301/01003 . . Triacylglycerol lipase (3.1.1.3)
- 301/01004 . . Phospholipase A2 (3.1.1.4)
- 301/01005 . . Lysophospholipase (3.1.1.5)
- 301/01006 . . Acetylesterase (3.1.1.6)
- 301/01007 . . Acetylcholinesterase (3.1.1.7)
- 301/01008 . . Cholinesterase (3.1.1.8), i.e. butyrylcholine-esterase
- 301/0101 . . Tropinesterase (3.1.1.10)
- 301/01011 . . Pectinesterase (3.1.1.11)
- 301/01013 . . Sterol esterase (3.1.1.13)
- 301/01014 . . Chlorophyllase (3.1.1.14)
- 301/01015 . . L-Arabinonolactonase (3.1.1.15)
- 301/01016 . . 4-Carboxymethyl-4-hydroxyisocrotonolactonase (3.1.1.16) ([C12Y 301/01024](#), [C12Y 503/03004](#) take precedence)
- 301/01017 . . Gluconolactonase (3.1.1.17)
- 301/01019 . . Uronolactonase (3.1.1.19)
- 301/0102 . . Tannase (3.1.1.20)
- 301/01021 . . Retinyl-palmitate esterase (3.1.1.21) ([C12Y 301/01001](#), [C12Y 301/01003](#) take precedence)
- 301/01022 . . Hydroxybutyrate-dimer hydrolase (3.1.1.22)
- 301/01023 . . Acylglycerol lipase (3.1.1.23)
- 301/01024 . . 3-Oxadipate enol-lactonase (3.1.1.24)
- 301/01025 . . 1,4-Lactonase (3.1.1.25)
- 301/01026 . . Galactolipase (3.1.1.26)
- 301/01027 . . 4-Pyridoxolactonase (3.1.1.27)
- 301/01028 . . Acylcarnitine hydrolase (3.1.1.28)
- 301/01029 . . Aminoacyl-tRNA hydrolase (3.1.1.29)
- 301/0103 . . D-Arabinonolactonase (3.1.1.30)
- 301/01031 . . 6-Phosphogluconolactonase (3.1.1.31)
- 301/01032 . . Phospholipase A1 (3.1.1.32)
- 301/01033 . . 6-Acetylglucose deacetylase (3.1.1.33)
- 301/01034 . . Lipoprotein lipase (3.1.1.34)
- 301/01035 . . Dihydrocoumarin hydrolase (3.1.1.35)
- 301/01036 . . Limonin-D-ring-lactonase (3.1.1.36)
- 301/01037 . . Steroid-lactonase (3.1.1.37)
- 301/01038 . . Triacetate-lactonase (3.1.1.38)
- 301/01039 . . Actinomycin lactonase (3.1.1.39)
- 301/0104 . . Orsellinate-depside hydrolase (3.1.1.40)
- 301/01041 . . Cephalosporin-C deacetylase (3.1.1.41)
- 301/01042 . . Chlorogenate hydrolase (3.1.1.42)
- 301/01043 . . Alpha-amino-acid esterase (3.1.1.43)
- 301/01044 . . 4-Methyloxaloacetate esterase (3.1.1.44)
- 301/01045 . . Carboxymethylenebutenolidase (3.1.1.45)
- 301/01046 . . Deoxylimonate A-ring-lactonase (3.1.1.46)
- 301/01047 . . 1-Alkyl-2-acetyl-glycerophosphocholine esterase (3.1.1.47), i.e. platelet-activating factor acetylhydrolase
- 301/01048 . . Fusarinine-C ornithinesterase (3.1.1.48)
- 301/01049 . . Sinapine esterase (3.1.1.49)
- 301/0105 . . Wax-ester hydrolase (3.1.1.50)
- 301/01051 . . Phorbol-diester hydrolase (3.1.1.51)
- 301/01052 . . Phosphatidylinositol deacylase (3.1.1.52)
- 301/01053 . . Sialate O-acetylcylase (3.1.1.53)
- 301/01054 . . Acetoxybutynylbithiophene deacetylase (3.1.1.54)
- 301/01055 . . Acetylsalicylate deacetylase (3.1.1.55)
- 301/01056 . . Methylumbelliferyl-acetate deacetylase (3.1.1.56)
- 301/01057 . . 2-Pyrone-4,6-dicarboxylate lactonase (3.1.1.57)
- 301/01058 . . N-Acetylgalactosaminoglycan deacetylase (3.1.1.58)
- 301/01059 . . Juvenile-hormone esterase (3.1.1.59)
- 301/0106 . . Bis(2-ethylhexyl)phthalate esterase (3.1.1.60)
- 301/01061 . . Protein-glutamate methylesterase (3.1.1.61)
- 301/01063 . . 11-Cis-retinyl-palmitate hydrolase (3.1.1.63)
- 301/01064 . . Retinoid isomerohydrolase (3.1.1.64)
- 301/01065 . . L-Rhamnono-1,4-lactonase (3.1.1.65)
- 301/01066 . . 5-(3,4-Diacetoxybut-1-ynyl)-2,2'-bithiophene deacetylase (3.1.1.66)
- 301/01067 . . Fatty-acyl-ethyl-ester synthase (3.1.1.67)
- 301/01068 . . Xylono-1,4-lactonase (3.1.1.68)
- 301/0107 . . Cetraxate benzylesterase (3.1.1.70)
- 301/01071 . . Acetylalkylglycerol acetylhydrolase (3.1.1.71)

301/01072	. . Acetylxylylan esterase (3.1.1.72)	301/03002	. . Acid phosphatase (3.1.3.2)
301/01073	. . Feruloyl esterase (3.1.1.73)	301/03003	. . Phosphoserine phosphatase (3.1.3.3)
301/01074	. . Cutinase (3.1.1.74)	301/03004	. . Phosphatidate phosphatase (3.1.3.4)
301/01075	. . Poly(3-hydroxybutyrate) depolymerase (3.1.1.75)	301/03005	. . 5'-Nucleotidase (3.1.3.5)
301/01076	. . Poly(3-hydroxyoctanoate) depolymerase (3.1.1.76)	301/03006	. . 3'-Nucleotidase (3.1.3.6)
301/01077	. . Acyloxyacyl hydrolase (3.1.1.77)	301/03007	. . 3'(2'),5'-Bisphosphate nucleotidase (3.1.3.7)
301/01078	. . Polyneuridine-aldehyde esterase (3.1.1.78)	301/03008	. . 3-Phytase (3.1.3.8)
301/01079	. . Hormone-sensitive lipase (3.1.1.79)	301/03009	. . Glucose-6-phosphatase (3.1.3.9)
301/0108	. . Acetylaljaline esterase (3.1.1.80)	301/0301	. . Glucose-1-phosphatase (3.1.3.10)
301/01081	. . Quorum-quenching N-acyl-homoserine lactonase (3.1.1.81)	301/03011	. . Fructose-bisphosphatase (3.1.3.11)
301/01082	. . Pheophorbide (3.1.1.82)	301/03012	. . Trehalose-phosphatase (3.1.3.12)
301/01083	. . Monoterpene epsilon-lactone hydrolase (3.1.1.83)	301/03013	. . Bisphosphoglycerate phosphatase (3.1.3.13)
301/01084	. . Cocaine esterase (3.1.1.84)	301/03014	. . Methylphosphothioglycerate phosphatase (3.1.3.14)
301/01085	. . Pimelyl-[acyl-carrier protein] methyl ester esterase (3.1.1.85)	301/03015	. . Histidinol-phosphatase (3.1.3.15)
301/01086	. . Rhamnogalacturonan acylesterase (3.1.1.86)	301/03016	. . Phosphoprotein phosphatase (3.1.3.16), i.e. calcineurin
301/01087	. . Fumonisin B1 esterase (3.1.1.87)	301/03017	. . [Phosphorylase] phosphatase (3.1.3.17)
301/01088	. . Pyrethroid hydrolase (3.1.1.88)	301/03018	. . Phosphoglycolate phosphatase (3.1.3.18)
301/01089	. . Protein phosphatase methylesterase-1 (3.1.1.89)	301/03019	. . Glycerol-2-phosphatase (3.1.3.19)
301/0109	. . All-trans-retinyl ester 13-cis isomerohydrolase (3.1.1.90)	301/0302	. . Phosphoglycerate phosphatase (3.1.3.20)
301/01091	. . 2-Oxo-3-(5-oxofuran-2-ylidene)propanoate lactonase (3.1.1.91)	301/03021	. . Glycerol-1-phosphatase (3.1.3.21)
301/01092	. . 4-Sulfomuconolactone hydrolase (3.1.1.92)	301/03022	. . Mannitol-1-phosphatase (3.1.3.22)
301/01093	. . Mycophenolic acid acyl-glucuronide esterase (3.1.1.93)	301/03023	. . Sugar-phosphatase (3.1.3.23)
301/02	. . Thioester hydrolases (3.1.2)	301/03024	. . Sucrose-phosphate phosphatase (3.1.3.24)
301/02001	. . Acetyl-CoA hydrolase (3.1.2.1)	301/03025	. . Inositol-phosphate phosphatase (3.1.3.25)
301/02002	. . Palmitoyl-CoA hydrolase (3.1.2.2)	301/03026	. . 4-Phytase (3.1.3.26), i.e. 6-phytase
301/02003	. . Succinyl-CoA hydrolase (3.1.2.3)	301/03027	. . Phosphatidylglycerophosphatase (3.1.3.27)
301/02004	. . 3-Hydroxyisobutyryl-CoA hydrolase (3.1.2.4)	301/03028	. . ADP-phosphoglycerate phosphatase (3.1.3.28)
301/02005	. . Hydroxymethylglutaryl-CoA hydrolase (3.1.2.5)	301/03029	. . N-Acylneuraminate-9-phosphatase (3.1.3.29)
301/02006	. . Hydroxyacylglutathione hydrolase (3.1.2.6)	301/03031	. . Nucleotidase (3.1.3.31)
301/02007	. . Glutathione thioesterase (3.1.2.7)	301/03032	. . Polynucleotide 3'-phosphatase (3.1.3.32)
301/0201	. . Formyl-CoA hydrolase (3.1.2.10)	301/03033	. . Polynucleotide 5'-phosphatase (3.1.3.33)
301/02011	. . Acetoacetyl-CoA hydrolase (3.1.2.11)	301/03034	. . Deoxynucleotide 3'-phosphatase (3.1.3.34)
301/02012	. . S-Formylglutathione hydrolase (3.1.2.12)	301/03035	. . Thymidylate 5'-phosphatase (3.1.3.35)
301/02013	. . S-Succinylglutathione hydrolase (3.1.2.13)	301/03036	. . Phosphoinositide 5-phosphatase (3.1.3.36)
301/02014	. . Oleoyl-[acyl-carrier-protein] hydrolase (3.1.2.14), i.e. ACP-thioesterase	301/03037	. . Sedoheptulose-bisphosphatase (3.1.3.37)
301/02015	. . Ubiquitin thioesterase (3.1.2.15)	301/03038	. . 3-Phosphoglycerate phosphatase (3.1.3.38)
301/02016	. . Citrate-lyase deacetylase (3.1.2.16)	301/03039	. . Streptomycin-6-phosphatase (3.1.3.39)
301/02017	. . (S)-Methylmalonyl-CoA hydrolase (3.1.2.17)	301/0304	. . Guanidinodeoxy-scyllo-inositol-4-phosphatase (3.1.3.40)
301/02018	. . ADP-dependent short-chain-acyl-CoA hydrolase (3.1.2.18)	301/03041	. . 4-Nitrophenylphosphatase (3.1.3.41)
301/02019	. . ADP-dependent medium-chain-acyl-CoA hydrolase (3.1.2.19)	301/03042	. . [Glycogen-synthase-D] phosphatase (3.1.3.42)
301/0202	. . Acyl-CoA hydrolase (3.1.2.20)	301/03043	. . [Pyruvate dehydrogenase (acetyl-transferring)]-phosphatase (3.1.3.43)
301/02021	. . Dodecanoyl-[acyl-carrier-protein] hydrolase (3.1.2.21)	301/03044	. . [Acetyl-CoA carboxylase]-phosphatase (3.1.3.44)
301/02022	. . Palmitoyl-protein hydrolase (3.1.2.22)	301/03045	. . 3-Deoxy-manno-octulosonate-8-phosphatase (3.1.3.45)
301/02023	. . 4-Hydroxybenzoyl-CoA thioesterase (3.1.2.23)	301/03046	. . Fructose-2,6-bisphosphate 2-phosphatase (3.1.3.46)
301/02025	. . Phenylacetyl-CoA hydrolase (3.1.2.25)	301/03047	. . [Hydroxymethylglutaryl-CoA reductase (NADPH)]-phosphatase (3.1.3.47)
301/02026	. . Bile-acid-CoA hydrolase (3.1.2.26)	301/03048	. . Protein-tyrosine-phosphatase (3.1.3.48)
301/02027	. . Choloyl-CoA hydrolase (3.1.2.27)	301/03049	. . [Pyruvate kinase]-phosphatase (3.1.3.49)
301/02028	. . 1,4-Dihydroxy-2-naphthoyl-CoA hydrolase (3.1.2.28)	301/0305	. . Sorbitol-6-phosphatase (3.1.3.50)
301/02029	. . Fluoroacetyl-CoA thioesterase (3.1.2.29)	301/03051	. . Dolichyl-phosphatase (3.1.3.51)
301/03	. . Phosphoric monoester hydrolases (3.1.3)	301/03052	. . [3-Methyl-2-oxobutanoate dehydrogenase (2-methylpropanoyl-transferring)]-phosphatase (3.1.3.52)
301/03001	. . Alkaline phosphatase (3.1.3.1)	301/03053	. . [Myosin-light-chain] phosphatase (3.1.3.53)
		301/03054	. . Fructose-2,6-bisphosphate 6-phosphatase (3.1.3.54)



301/03055	. . Caldesmon-phosphatase (3.1.3.55)	301/04017	. . 3',5'-Cyclic-nucleotide phosphodiesterase (3.1.4.17)
301/03056	. . Inositol-polyphosphate 5-phosphatase (3.1.3.56)	301/04035	. . 3',5'-Cyclic-GMP phosphodiesterase (3.1.4.35)
301/03057	. . Inositol-1,4-bisphosphate 1-phosphatase (3.1.3.57)	301/04037	. . 2',3'-Cyclic-nucleotide 3'-phosphodiesterase (3.1.4.37)
301/03058	. . Sugar-terminal-phosphatase (3.1.3.58)	301/04038	. . Glycerophosphocholine cholinephosphodiesterase (3.1.4.38)
301/03059	. . Alkylacetylgllycerophosphatase (3.1.3.59)	301/04039	. . Alkylglycerophosphoethanolamine phosphodiesterase (3.1.4.39)
301/0306	. . Phosphoenolpyruvate phosphatase (3.1.3.60)	301/0404	. . CMP-N-acylneuraminate phosphodiesterase (3.1.4.40)
301/03062	. . Multiple inositol-polyphosphate phosphatase (3.1.3.62)	301/04041	. . Sphingomyelin phosphodiesterase D (3.1.4.41)
301/03063	. . 2-Carboxy-D-arabinitol-1-phosphatase (3.1.3.63)	301/04042	. . Glycerol-1,2-cyclic-phosphate 2-phosphodiesterase (3.1.4.42)
301/03064	. . Phosphatidylinositol-3-phosphatase (3.1.3.64)	301/04043	. . Glycerophosphoinositol inositolphosphodiesterase (3.1.4.43)
301/03066	. . Phosphatidylinositol-3,4-bisphosphate 4-phosphatase (3.1.3.66)	301/04044	. . Glycerophosphoinositol glycerophosphodiesterase (3.1.4.44)
301/03067	. . Phosphatidylinositol-3,4,5-trisphosphate 3-phosphatase (3.1.3.67)	301/04045	. . N-Acetylglucosamine-1-phosphodiester alpha-N-acetylglucosaminidase (3.1.4.45)
301/03068	. . 2-Deoxyglucose-6-phosphatase (3.1.3.68)	301/04046	. . Glycerophosphodiester phosphodiesterase (3.1.4.46)
301/03069	. . Glucosylglycerol 3-phosphatase (3.1.3.69)	301/04048	. . Dolichylphosphate-glucose phosphodiesterase (3.1.4.48)
301/0307	. . Mannosyl-3-phosphoglycerate phosphatase (3.1.3.70)	301/04049	. . Dolichylphosphate-mannose phosphodiesterase (3.1.4.49)
301/03071	. . 2-Phosphosulfolactate phosphatase (3.1.3.71)	301/0405	. . Glycosylphosphatidylinositol phospholipase D (3.1.4.50)
301/03072	. . 5-Phytase (3.1.3.72)	301/04051	. . Glucose-1-phospho-D-mannosylglycoprotein phosphodiesterase (3.1.4.51)
301/03073	. . Adenosylcobalamin/alpha-ribazole phosphatase (3.1.3.73)	301/04052	. . Cyclic-guanylate-specific phosphodiesterase (3.1.4.52)
301/03074	. . Pyridoxal phosphatase (3.1.3.74)	301/04053	. . 3',5'-Cyclic-AMP phosphodiesterase (3.1.4.53)
301/03075	. . Phosphoethanolamine/phosphocholine phosphatase (3.1.3.75)	301/04054	. . N-Acetylphosphatidylethanolamine-hydrolyzing phospholipase D (3.1.4.54)
301/03076	. . Lipid-phosphate phosphatase (3.1.3.76)	301/05	. . Triphosphoric monoester hydrolases (3.1.5)
301/03077	. . Acireductone synthase (3.1.3.77)	301/05001	. . dGTPase (3.1.5.1)
301/03078	. . Phosphatidylinositol-4,5-bisphosphate 4-phosphatase (3.1.3.78)	301/06	. . Sulfuric ester hydrolases (3.1.6)
301/03079	. . Mannosylfructose-phosphate phosphatase (3.1.3.79)	301/06001	. . Arylsulfatase (3.1.6.1)
301/0308	. . 2,3-Bisphosphoglycerate 3-phosphatase (3.1.3.80)	301/06002	. . Steryl-sulfatase (3.1.6.2)
301/03081	. . Diacylglycerol diphosphate phosphatase (3.1.3.81)	301/06003	. . Glycosulfatase (3.1.6.3)
301/03082	. . D-Glycero-beta-D-manno-heptose 1,7-bisphosphate 7-phosphatase (3.1.3.82)	301/06004	. . N-Acetylgalactosamine-6-sulfatase (3.1.6.4)
301/03083	. . D-Glycero-alpha-D-manno-heptose-1,7-bisphosphate 7-phosphatase (3.1.3.83)	301/06006	. . Choline-sulfatase (3.1.6.6)
301/03084	. . ADP-ribose 1"-phosphate phosphatase (3.1.3.84)	301/06007	. . Cellulose-polysulfatase (3.1.6.7)
301/03085	. . Glucosyl-3-phosphoglycerate phosphatase (3.1.3.85)	301/06008	. . Cerebroside-sulfatase (3.1.6.8)
301/03086	. . Phosphatidylinositol-3,4,5-trisphosphate 5-phosphatase (3.1.3.86)	301/06009	. . Chondro-4-sulfatase (3.1.6.9)
301/03087	. . 2-Hydroxy-3-keto-5-methylthiopentenyl-1-phosphate phosphatase (3.1.3.87)	301/0601	. . Chondro-6-sulfatase (3.1.6.10)
301/03088	. . 5"-Phosphoribostamycin phosphatase (3.1.3.88)	301/06011	. . Disulfoglucosamine-6-sulfatase (3.1.6.11)
301/04	. . Phosphoric diester hydrolases (3.1.4)	301/06012	. . N-Acetylgalactosamine-4-sulfatase (3.1.6.12)
301/04001	. . Phosphodiesterase I (3.1.4.1)	301/06013	. . Iduronate-2-sulfatase (3.1.6.13)
301/04002	. . Glycerophosphocholine phosphodiesterase (3.1.4.2)	301/06014	. . N-Acetylglucosamine-6-sulfatase (3.1.6.14)
301/04003	. . Phospholipase C (3.1.4.3)	301/06015	. . N-Sulfoglucosamine-3-sulfatase (3.1.6.15)
301/04004	. . Phospholipase D (3.1.4.4)	301/06016	. . Monomethyl-sulfatase (3.1.6.16)
301/04011	. . Phosphoinositide phospholipase C (3.1.4.11)	301/06017	. . D-Lactate-2-sulfatase (3.1.6.17)
301/04012	. . Sphingomyelin phosphodiesterase (3.1.4.12)	301/06018	. . Glucuronate-2-sulfatase (3.1.6.18)
301/04013	. . Serine-ethanolaminephosphate phosphodiesterase (3.1.4.13)	301/07	. . Diphosphoric monoester hydrolases (3.1.7)
301/04014	. . [Acyl-carrier-protein] phosphodiesterase (3.1.4.14)	301/07001	. . Prenyl-diphosphatase (3.1.7.1)
301/04015	. . Adenylyl-[glutamate--ammonia ligase] hydrolase (3.1.4.15)	301/07002	. . Guanosine-3',5'-bis(diphosphate) 3'-diphosphatase (3.1.7.2)
301/04016	. . 2',3'-Cyclic-nucleotide 2'-phosphodiesterase (3.1.4.16)	301/07003	. . Monoterpenyl-diphosphatase (3.1.7.3)
		301/07004	. . Sclareol cyclase (3.1.7.4)
		301/07005	. . Geranylgeranyl diphosphate diphosphatase (3.1.7.5)

- 301/07006 . . Farnesyl diphosphatase (3.1.7.6)  
 301/07007 . . Drimenol cyclase (3.1.7.7)  
 301/07008 . . Tuberculosinol synthase (3.1.7.8)  
 301/07009 . . Isotuberculosinol synthase (3.1.7.9)  
 301/0701 . . (13E)-Labda-7,13-dien-15-ol synthase (3.1.7.10)  
 301/07011 . . Geranyl diphosphate diphosphatase (3.1.7.11)  
 301/08 . . Phosphoric triester hydrolases (3.1.8)  
 301/08001 . . Aryldialkylphosphatase (3.1.8.1), i.e. paraoxonase  
 301/08002 . . Diisopropyl-fluorophosphatase (3.1.8.2)  
 301/11 . . Exodeoxyribonucleases producing 5'-phosphomonoesters (3.1.11)  
 301/11001 . . Exodeoxyribonuclease I (3.1.11.1)  
 301/11002 . . Exodeoxyribonuclease III (3.1.11.2)  
 301/11003 . . Exodeoxyribonuclease (lambda-induced) (3.1.11.3)  
 301/11004 . . Exodeoxyribonuclease (phage SP3-induced) (3.1.11.4)  
 301/11005 . . Exodeoxyribonuclease V (3.1.11.5)  
 301/11006 . . Exodeoxyribonuclease VII (3.1.11.6)  
 301/13 . . Exoribonucleases producing 5'-phosphomonoesters (3.1.13)  
 301/13001 . . Exoribonuclease II (3.1.13.1)  
 301/13002 . . Exoribonuclease H (3.1.13.2)  
 301/13003 . . Oligonucleotidase (3.1.13.3)  
 301/13004 . . Poly(A)-specific ribonuclease (3.1.13.4)  
 301/13005 . . Ribonuclease D (3.1.13.5)  
 301/14 . . Exoribonucleases producing 3'-phosphomonoesters (3.1.14)  
 301/14001 . . Yeast ribonuclease (3.1.14.1)  
 301/15 . . Exonucleases active with either ribo- or deoxyribonucleic acids and producing 5'-phosphomonoesters (3.1.15)  
 301/15001 . . Venom exonuclease (3.1.15.1)  
 301/16 . . Exonucleases active with either ribo- or deoxyribonucleic acids and producing 3'-phosphomonoesters (3.16)  
 301/16001 . . Spleen exonuclease (3.1.16.1), i.e. 5->3 exoribonuclease  
 301/21 . . Endodeoxyribonucleases producing 5'-phosphomonoesters (3.1.21)  
 301/21001 . . Deoxyribonuclease I (3.1.21.1)  
 301/21002 . . Deoxyribonuclease IV (phage-T(4)-induced) (3.1.21.2)  
 301/21003 . . Type I site-specific deoxyribonuclease (3.1.21.3)  
 301/21004 . . Type II site-specific deoxyribonuclease (3.1.21.4)  
 301/21005 . . Type III site-specific deoxyribonuclease (3.1.21.5)  
 301/21006 . . CC-preferring endodeoxyribonuclease (3.1.21.6)  
 301/21007 . . Deoxyribonuclease V (3.1.21.7)  
 301/22 . . Endodeoxyribonucleases producing 3'-phosphomonoesters (3.1.22)  
 301/22001 . . Deoxyribonuclease II (3.1.22.1)  
 301/22002 . . Aspergillus deoxyribonuclease K(1) (3.1.22.2)  
 301/22004 . . Crossover junction endodeoxyribonuclease (3.1.22.4)  
 301/22005 . . Deoxyribonuclease X (3.1.22.5)  
 301/25 . . Site-specific endodeoxyribonucleases specific for altered bases (3.1.25)  
 301/25001 . . Deoxyribonuclease (pyrimidine dimer)(3.1.25.1)  
 301/26 . . Endoribonucleases producing 5'-phosphomonoesters (3.1.26)  
 301/26001 . . Physarum polycephalum ribonuclease (3.1.26.1)  
 301/26002 . . Ribonuclease alpha (3.1.26.2)  
 301/26003 . . Ribonuclease III (3.1.26.3)  
 301/26004 . . Ribonuclease H (3.1.26.4)  
 301/26005 . . Ribonuclease P (3.1.26.5)  
 301/26006 . . Ribonuclease IV (3.1.26.6)  
 301/26007 . . Ribonuclease P4 (3.1.26.7)  
 301/26008 . . Ribonuclease M5 (3.1.26.8)  
 301/26009 . . Ribonuclease (poly-(U)-specific)(3.1.26.9)  
 301/2601 . . Ribonuclease IX (3.1.26.10)  
 301/26011 . . tRNase Z (3.1.26.11)  
 301/26012 . . Ribonuclease E (3.1.26.12)  
 301/26013 . . Retroviral ribonuclease H (3.1.26.13)  
 301/27 . . Endoribonucleases producing 3'-phosphomonoesters (3.1.27)  
 301/27001 . . Ribonuclease T2 (3.1.27.1)  
 301/27002 . . Bacillus subtilis ribonuclease (3.1.27.2)  
 301/27003 . . Ribonuclease T1 (3.1.27.3)  
 301/27004 . . Ribonuclease U2 (3.1.27.4)  
 301/27005 . . Pancreatic ribonuclease (3.1.27.5)  
 301/27006 . . Enterobacter ribonuclease (3.1.27.6)  
 301/27007 . . Ribonuclease F (3.1.27.7)  
 301/27008 . . Ribonuclease V (3.1.27.8)  
 301/27009 . . tRNA-intron endonuclease (3.1.27.9)  
 301/2701 . . rRNA endonuclease (3.1.27.10)  
 301/30 . . Endoribonucleases active with either ribo- or deoxyribonucleic acids and producing 5'-phosphomonoesters (3.1.30)  
 301/30001 . . Aspergillus nuclease S1 (3.1.30.1)  
 301/30002 . . Serratia marcescens nuclease (3.1.30.2)  
 301/31 . . Endoribonucleases active with either ribo- or deoxyribonucleic acids and producing 3'-phosphomonoesters (3.1.31)  
 301/31001 . . Micrococcal nuclease (3.1.31.1)  
**302/00 Hydrolases acting on glycosyl compounds, i.e. glycosylases (3.2)**  
 302/01 . . Glycosidases, i.e. enzymes hydrolysing O- and S-glycosyl compounds (3.2.1)  
 302/01001 . . Alpha-amylase (3.2.1.1)  
 302/01002 . . Beta-amylase (3.2.1.2)  
 302/01003 . . Glucan 1,4-alpha-glucosidase (3.2.1.3), i.e. glucoamylase  
 302/01004 . . Cellulase (3.2.1.4), i.e. endo-1,4-beta-glucanase  
 302/01006 . . Endo-1,3(4)-beta-glucanase (3.2.1.6)  
 302/01007 . . Inulinase (3.2.1.7)  
 302/01008 . . Endo-1,4-beta-xylanase (3.2.1.8)  
 302/0101 . . Oligo-1,6-glucosidase (3.2.1.10), i.e. sucrase  
 302/01011 . . Dextranase (3.2.1.11)  
 302/01014 . . Chitinase (3.2.1.14)  
 302/01015 . . Polygalacturonase (3.2.1.15)  
 302/01017 . . Lysozyme (3.2.1.17)  
 302/01018 . . Exo-alpha-sialidase (3.2.1.18), i.e. trans-sialidase  
 302/01019 . . Heparinase (3.2.1.19)  
 302/0102 . . Alpha-glucosidase (3.2.1.20)  
 302/01021 . . Beta-glucosidase (3.2.1.21)  
 302/01022 . . Alpha-galactosidase (3.2.1.22)  
 302/01023 . . Beta-galactosidase (3.2.1.23), i.e. exo-(1->4)-beta-D-galactanase  
 302/01024 . . Alpha-mannosidase (3.2.1.24)  
 302/01025 . . Beta-mannosidase (3.2.1.25), i.e. mannanase  
 302/01026 . . Beta-fructofuranosidase (3.2.1.26), i.e. invertase  
 302/01028 . . Alpha,alpha-trehalase (3.2.1.28)  
 302/01031 . . Beta-glucuronidase (3.2.1.31)

302/01032	. . Xylan endo-1,3-beta-xylosidase (3.2.1.32), i.e. endo-1-3-beta-xylanase	302/01088	. . Beta-L-arabinosidase (3.2.1.88)
302/01033	. . Amylo-alpha-1,6-glucosidase (3.2.1.33)	302/01089	. . Arabinogalactan endo-beta-1,4-galactanase (3.2.1.89)
302/01035	. . Hyaluronoglucosaminidase (3.2.1.35), i.e. hyaluronidase	302/01091	. . Cellulose 1,4-beta-cellobiosidase (3.2.1.91)
302/01036	. . Hyaluronoglucuronidase (3.2.1.36)	302/01092	. . Peptidoglycan beta-N-acetylmuramidase (3.2.1.92)
302/01037	. . Xylan 1,4-beta-xylosidase (3.2.1.37)	302/01093	. . Alpha,alpha-phosphotrehalase (3.2.1.93)
302/01038	. . Beta-D-fucosidase (3.2.1.38)	302/01094	. . Glucan 1,6-alpha-isomaltosidase (3.2.1.94)
302/01039	. . Glucan endo-1,3-beta-D-glucosidase (3.2.1.39)	302/01095	. . Dextran 1,6-alpha-isomaltotriosidase (3.2.1.95)
302/0104	. . Alpha-L-rhamnosidase (3.2.1.40)	302/01096	. . Mannosyl-glycoprotein endo-beta-N-acetylglucosaminidase (3.2.1.96)
302/01041	. . Pullulanase (3.2.1.41)	302/01097	. . Glycopeptide alpha-N-acetylgalactosaminidase (3.2.1.97)
302/01042	. . GDP-glucosidase (3.2.1.42)	302/01098	. . Glucan 1,4-alpha-maltohexaosidase (3.2.1.98)
302/01043	. . Beta-L-rhamnosidase (3.2.1.43)	302/01099	. . Arabinan endo-1,5-alpha-L-arabinosidase (3.2.1.99)
302/01044	. . Fucoidanase (3.2.1.44)	302/011	. . Mannan 1,4-mannobiosidase (3.2.1.100)
302/01045	. . Glucosylceramidase (3.2.1.45), i.e. beta-glucocerebrosidase	302/01101	. . Mannan endo-1,6-alpha-mannosidase (3.2.1.101), i.e. endo-1,6-beta-mannanase
302/01046	. . Galactosylceramidase (3.2.1.46)	302/01102	. . Blood-group-substance endo-1,4-beta-galactosidase (3.2.1.102)
302/01047	. . Galactosylgalactosylglucosylceramidase (3.2.1.47)	302/01103	. . Keratan-sulfate endo-1,4-beta-galactosidase (3.2.1.103)
302/01048	. . Sucrose alpha-glucosidase (3.2.1.48), i.e. sucrase	302/01104	. . Steryl-beta-glucosidase (3.2.1.104)
302/01049	. . Alpha-N-acetylgalactosaminidase (3.2.1.49)	302/01105	. . 3-Alpha-(S)-strictosidine beta-glucosidase (3.2.1.105)
302/0105	. . Alpha-N-acetylglucosaminidase (3.2.1.50)	302/01106	. . Mannosyl-oligosaccharide glucosidase (3.2.1.106), i.e. glucosidase I
302/01051	. . Alpha-L-fucosidase (3.2.1.51)	302/01107	. . Protein-glucosylgalactosylhydroxylysine glucosidase (3.2.1.107)
302/01052	. . Beta-N-acetylhexosaminidase (3.2.1.52)	302/01108	. . Lactase (3.2.1.108)
302/01053	. . Beta-N-acetylgalactosaminidase (3.2.1.53)	302/01109	. . Endogalactosaminidase (3.2.1.109)
302/01054	. . Cyclomaltodextrinase (3.2.1.54), i.e. cyclodextrinase	302/01111	. . 1,3-Alpha-L-fucosidase (3.2.1.111), i.e. 1,3-alpha-fucosidase
302/01055	. . Alpha-N-arabinofuranosidase (3.2.1.55)	302/01112	. . 2-Deoxyglucosidase (3.2.1.112)
302/01056	. . Glucuronosyl-disulfoglucosamine glucuronidase (3.2.1.56), i.e. glycuronidase	302/01113	. . Mannosyl-oligosaccharide 1,2-alpha-mannosidase (3.2.1.113), i.e. alpha-1,2-mannosidase
302/01057	. . Isopullulanase (3.2.1.57)	302/01114	. . Mannosyl-oligosaccharide 1,3-1,6-alpha-mannosidase (3.2.1.114)
302/01058	. . Glucan 1,3-beta-glucosidase (3.2.1.58)	302/01115	. . Branched-dextran exo-1,2-alpha-glucosidase (3.2.1.115)
302/01059	. . Glucan endo-1,3-alpha-glucosidase (3.2.1.59)	302/01116	. . Glucan 1,4-alpha-maltotriohydrolase (3.2.1.116)
302/0106	. . Glucan 1,4-alpha-maltotetraohydrolase (3.2.1.60)	302/01117	. . Amygdalin beta-glucosidase (3.2.1.117)
302/01061	. . Mycodextranase (3.2.1.61)	302/01118	. . Prunasin beta-glucosidase (3.2.1.118), i.e. prunasin hydrolase
302/01062	. . Glycosylceramidase (3.2.1.62)	302/01119	. . Vicianin beta-glucosidase (3.2.1.119)
302/01063	. . 1,2-Alpha-L-fucosidase (3.2.1.63)	302/0112	. . Oligoxyloglucan beta-glycosidase (3.2.1.120)
302/01064	. . 2,6-Beta-fructan 6-levanbiohydrolase (3.2.1.64)	302/01121	. . Polymannuronate hydrolase (3.2.1.121)
302/01065	. . Levanase (3.2.1.65)	302/01122	. . Maltose-6'-phosphate glucosidase (3.2.1.122)
302/01066	. . Quercitrinase (3.2.1.66)	302/01123	. . Endoglycosylceramidase (3.2.1.123)
302/01067	. . Galacturan 1,4-alpha-galacturonidase (3.2.1.67)	302/01124	. . 3-Deoxy-2-octulosonidase (3.2.1.124)
302/01068	. . Isoamylase (3.2.1.68)	302/01125	. . Raucaffricine beta-glucosidase (3.2.1.125)
302/0107	. . Glucan 1,6-alpha-glucosidase (3.2.1.70)	302/01126	. . Coniferin beta-glucosidase (3.2.1.126)
302/01071	. . Glucan endo-1,2-beta-glucosidase (3.2.1.71)	302/01127	. . 1,6-alpha-L-fucosidase (3.2.1.127)
302/01072	. . Xylan 1,3-beta-xylosidase (3.2.1.72)	302/01128	. . Glycyrrhizinate beta-glucuronidase (3.2.1.128), i.e. GL beta-D-glucuronidase
302/01073	. . Licheninase (3.2.1.73)	302/01129	. . Endo-alpha-sialidase (3.2.1.129)
302/01074	. . Glucan 1,4-beta-glucosidase (3.2.1.74)	302/0113	. . Glycoprotein endo-alpha-1,2-mannosidase (3.2.1.130)
302/01075	. . Glucan endo-1,6-beta-glucosidase (3.2.1.75)	302/01131	. . Xylan alpha-1,2-glucuronosidase (3.2.1.131)
302/01076	. . L-Iduronidase (3.2.1.76)	302/01132	. . Chitosanase (3.2.1.132)
302/01077	. . Mannan 1,2-(1,3)-alpha-mannosidase (3.2.1.77)	302/01133	. . Glucan 1,4-alpha-maltohydrolase (3.2.1.133), i.e. maltogenic alpha-amylase
302/01078	. . Mannan endo-1,4-beta-mannosidase (3.2.1.78), i.e. endo-beta-mannanase		
302/0108	. . Fructan beta-fructosidase (3.2.1.80)		
302/01081	. . Beta-agarase (3.2.1.81)		
302/01082	. . Exo-poly-alpha-galacturonosidase (3.2.1.82)		
302/01083	. . Kappa-carrageenase (3.2.1.83)		
302/01084	. . Glucan 1,3-alpha-glucosidase (3.2.1.84), i.e. mutanase		
302/01085	. . 6-Phospho-beta-galactosidase (3.2.1.85)		
302/01086	. . 6-Phospho-beta-glucosidase (3.2.1.86)		
302/01087	. . Capsular-polysaccharide endo-1,3-alpha-galactosidase (3.2.1.87)		

- 302/01134 . . Difructose-anhydride synthase (3.2.1.134)
- 302/01135 . . Neopullulanase (3.2.1.135)
- 302/01136 . . Glucuronoarabinoxylan endo-1,4-beta-xylanase (3.2.1.136), i.e. feraxanase or feraxan-endoxylanase
- 302/01137 . . Mannan exo-1,2-1,6-alpha-mannosidase (3.2.1.137)
- 302/01139 . . Alpha-glucuronidase (3.2.1.139)
- 302/0114 . . Lacto-N-biosidase (3.2.1.140)
- 302/01141 . . 4-Alpha-D-[(1->4)-alpha-D-glucano] trehalose trehalohydrolase (3.2.1.141)
- 302/01142 . . Limit dextrinase (3.2.1.142)
- 302/01143 . . Poly(ADP-ribose) glycohydrolase (3.2.1.143)
- 302/01144 . . 3-Deoxyoctulosonase (3.2.1.144)
- 302/01145 . . Galactan 1,3-beta-galactosidase (3.2.1.145), i.e. arabinogalactan endo-1,3-beta-galactosidase
- 302/01146 . . Beta-galactofuranosidase (3.2.1.146)
- 302/01147 . . Thioglucosidase (3.2.1.147), i.e. myrosinase
- 302/01149 . . Beta-primeverosidase (3.2.1.149)
- 302/0115 . . Oligoxyloglucan reducing-end-specific cellobiohydrolase (3.2.1.150)
- 302/01151 . . Xyloglucan-specific endo-beta-1,4-glucanase (3.2.1.151), i.e. endoxyloglucanase
- 302/01152 . . Mannosylglycoprotein endo-beta-mannosidase (3.2.1.152)
- 302/01153 . . Fructan beta-(2,1)-fructosidase (3.2.1.153)
- 302/01154 . . Fructan beta-(2,6)-fructosidase (3.2.1.154)
- 302/01155 . . Xyloglucan-specific exo-beta-1,4-glucanase (3.2.1.155), i.e. exoxyloglucanase
- 302/01156 . . Oligosaccharide reducing-end xylanase (3.2.1.156)
- 302/01157 . . Iota-carrageenase (3.2.1.157)
- 302/01158 . . Alpha-agarase (3.2.1.158)
- 302/01159 . . Alpha-neoagaro-oligosaccharide hydrolase (3.2.1.159)
- 302/01161 . . Beta-apiosyl-beta-glucosidase (3.2.1.161)
- 302/01162 . . Lambda-carrageenase (3.2.1.162)
- 302/01163 . . 1,6-Alpha-D-mannosidase (3.2.1.163)
- 302/01164 . . Galactan endo-1,6-beta-galactosidase (3.2.1.164)
- 302/01165 . . Exo-1,4-beta-D-glucosaminidase (3.2.1.165), i.e. exochitosanase
- 302/01166 . . Heparanase (3.2.1.166)
- 302/01167 . . Baicalin-beta-D-glucuronidase (3.2.1.167)
- 302/01168 . . Hesperidin 6-O-alpha-L-rhamnosyl-beta-D-glucosidase (3.2.1.168)
- 302/01169 . . Protein O-GlcNAcase (3.2.1.169)
- 302/0117 . . Mannosylglycerate hydrolase (3.2.1.170)
- 302/01171 . . Rhamnogalacturonan hydrolase (3.2.1.171), i.e. rhamnogalacturonase
- 302/01172 . . Unsaturated rhamnogalacturonyl hydrolase (3.2.1.172)
- 302/01173 . . Rhamnogalacturonan galacturonohydrolase (3.2.1.173)
- 302/01174 . . Rhamnogalacturonan rhamnohydrolase (3.2.1.174)
- 302/01175 . . Beta-D-glucopyranosyl abscisate beta-glucosidase (3.2.1.175)
- 302/01176 . . Cellulose 1,4-beta-cellobiosidase (reducing end) (3.2.1.176)
- 302/01177 . . Alpha-D-xyloside xylohydrolase (3.2.1.177)
- 302/01178 . . Beta-porphyrane (3.2.1.178)
- 302/01179 . . Gellan tetrasaccharide unsaturated glucuronyl hydrolase (3.2.1.179)
- 302/0118 . . Unsaturated chondroitin disaccharide hydrolase (3.2.1.180)
- 302/01181 . . Galactan endo-beta-1,3-galactanase (3.2.1.181)
- 302/01182 . . 4-Hydroxy-7-methoxy-3-oxo-3,4-dihydro-2H-1,4-benzoxazin-2-yl glucoside beta-D-glucosidase (3.2.1.182)
- 302/01183 . . UDP-N-acetylglucosamine 2-epimerase (hydrolysing) (3.2.1.183)
- 302/01184 . . UDP-N,N'-diacetylglucosamine 2-epimerase (hydrolysing) (3.2.1.184)
- 302/02 . . hydrolysing N-glycosyl compounds (3.2.2)
- 302/02001 . . Purine nucleosidase (3.2.2.1)
- 302/02002 . . Inosine nucleosidase (3.2.2.2)
- 302/02003 . . Uridine nucleosidase (3.2.2.3)
- 302/02004 . . AMP nucleosidase (3.2.2.4)
- 302/02005 . . NAD<sup>+</sup> nucleosidase (3.2.2.5)
- 302/02006 . . NAD(P)<sup>+</sup> nucleosidase (3.2.2.6)
- 302/02007 . . Adenosine nucleosidase (3.2.2.7)
- 302/02008 . . Ribosylpyrimidine nucleosidase (3.2.2.8)
- 302/02009 . . Adenosylhomocysteine nucleosidase (3.2.2.9)
- 302/0201 . . Pyrimidine-5'-nucleotide nucleosidase (3.2.2.10)
- 302/02011 . . Beta-aspartyl-N-acetylglucosaminidase (3.2.2.11)
- 302/02012 . . Inosinate nucleosidase (3.2.2.12)
- 302/02013 . . 1-Methyladenosine nucleosidase (3.2.2.13)
- 302/02014 . . NMN nucleosidase (3.2.2.14)
- 302/02015 . . DNA-deoxyinosine glycosylase (3.2.2.15)
- 302/02016 . . Methylthioadenosine nucleosidase (3.2.2.16)
- 302/02017 . . Deoxyribodipyrimidine endonucleosidase (3.2.2.17)
- 302/02019 . . Protein ADP-ribosylarginine hydrolase (3.2.2.19)
- 302/0202 . . DNA-3-methyladenine glycosylase I (3.2.2.20), i.e. adenine DNA glycosylase
- 302/02021 . . DNA-3-methyladenine glycosylase II (3.2.2.21)
- 302/02022 . . rRNA N-glycosylase (3.2.2.22)
- 302/02023 . . DNA-formamidopyrimidine glycosylase (3.2.2.23)
- 302/02024 . . ADP-ribosyl-[dinitrogen reductase] hydrolase (3.2.2.24)
- 302/02025 . . N-Methyl nucleosidase (3.2.2.25)
- 302/02026 . . Futosine hydrolase (3.2.2.26)
- 302/02027 . . Uracil-DNA glycosylase (3.2.2.27)
- 302/02028 . . Double-stranded uracil-DNA glycosylase (3.2.2.28)
- 302/02029 . . Thymine-DNA glycosylase (3.2.2.29)
- 303/00 Hydrolases acting on ether bonds (3.3)**
- 303/01 . . Thioether and trialkylsulfonium hydrolases (3.3.1)
- 303/01001 . . Adenosylhomocysteinase (3.3.1.1)
- 303/01002 . . Adenosylmethionine hydrolase (3.3.1.2)
- 303/02 . . Ether hydrolases (3.3.2)
- 303/02001 . . Isochorismatase (3.3.2.1)
- 303/02002 . . Alkenylglycerophosphocholine hydrolase (3.3.2.2)
- 303/02003 . . Epoxide hydrolase (3.3.2.3) ([C12Y 303/02009](#), [C12Y 303/0201](#) take precedence)
- 303/02004 . . Trans-epoxysuccinate hydrolase (3.3.2.4)
- 303/02005 . . Alkenylglycerophosphoethanolamine hydrolase (3.3.2.5)
- 303/02006 . . Leukotriene-A4 hydrolase (3.3.2.6)
- 303/02007 . . Hepoxilin-epoxide hydrolase (3.3.2.7)
- 303/02008 . . Limonene-1,2-epoxide hydrolase (3.3.2.8)
- 303/02009 . . Microsomal epoxide hydrolase (3.3.2.9), i.e. styreneepoxide hydrolase

- 303/0201 . . Soluble epoxide hydrolase (3.3.2.10)  
 303/02011 . . Cholesterol-5,6-oxide hydrolase (3.3.2.11)
- 304/00 Hydrolases acting on peptide bonds, i.e. peptidases (3.4)**
- 304/11 . Aminopeptidases (3.4.11)  
 304/11001 . . Leucyl aminopeptidase (3.4.11.1)  
 304/11002 . . Membrane alanyl aminopeptidase (3.4.11.2), i.e. aminopeptidase N  
 304/11003 . . Cystinyl aminopeptidase (3.4.11.3)  
 304/11004 . . Tripeptide aminopeptidase (3.4.11.4)  
 304/11005 . . Prolyl aminopeptidase (3.4.11.5)  
 304/11006 . . Aminopeptidase B (3.4.11.6)  
 304/11007 . . Glutamyl aminopeptidase (3.4.11.7)  
 304/11009 . . Xaa-Pro aminopeptidase (3.4.11.9), i.e. aminopeptidase P  
 304/1101 . . Bacterial leucyl aminopeptidase (3.4.11.10)  
 304/11011 . . Aminopeptidase (3.4.11.11)  
 304/11013 . . Clostridial aminopeptidase (3.4.11.13)  
 304/11014 . . Cytosol alanyl aminopeptidase (3.4.11.14)  
 304/11015 . . Aminopeptidase Y (3.4.11.15), i.e. lysyl aminopeptidase  
 304/11016 . . Xaa-Trp aminopeptidase (3.4.11.16)  
 304/11017 . . Tryptophanyl aminopeptidase (3.4.11.17)  
 304/11018 . . Methionyl aminopeptidase (3.4.11.18)  
 304/11019 . . D-Stereospecific aminopeptidase (3.4.11.19)  
 304/1102 . . Aminopeptidase Ey (3.4.11.20)  
 304/11021 . . Aspartyl aminopeptidase (3.4.11.21)  
 304/11022 . . Aminopeptidase I (3.4.11.22)  
 304/11023 . . PepB aminopeptidase (3.4.11.23)  
 304/11024 . . Aminopeptidase S (3.4.11.24)  
 304/11025 . . Beta-peptidyl aminopeptidase (3.4.11.25)  
 304/11026 . . Intermediate cleaving peptidase 55 (3.4.11.26)  
 304/13 . Dipeptidases (3.4.13)  
 304/13003 . . Xaa-His dipeptidase (3.4.13.3) ([C12Y 304/13018](#), [C12Y 304/1302](#) take precedence)  
 304/13004 . . Xaa-Arg dipeptidase (3.4.13.4)  
 304/13005 . . Xaa-methyl-His dipeptidase (3.4.13.5)  
 304/13007 . . Glu-Glu dipeptidase (3.4.13.7)  
 304/13009 . . Xaa-Pro dipeptidase (3.4.13.9) i.e. prolidase  
 304/13011 . . Dipeptidase (3.4.13.11) ([C12Y 304/13018](#), [C12Y 304/13019](#) take precedence)  
 304/13012 . . Met-Xaa dipeptidase (3.4.13.12)  
 304/13017 . . Non-stereospecific dipeptidase (3.4.13.17)  
 304/13018 . . Cytosol nonspecific dipeptidase (3.4.13.18), i.e. glycyl-leucine dipeptidase  
 304/13019 . . Membrane dipeptidase (3.4.13.19)  
 304/1302 . . Beta-Ala-His dipeptidase (3.4.13.20)  
 304/13021 . . Dipeptidase E (3.4.13.21)  
 304/13022 . . D-Ala-D-Ala dipeptidase (3.4.13.22)  
 304/14 . Dipeptidyl-peptidases and tripeptidyl-peptidases (3.4.14)  
 304/14001 . . Dipeptidyl-peptidase I (3.4.14.1), i.e. cathepsin-C  
 304/14002 . . Dipeptidyl-peptidase II (3.4.14.2)  
 304/14004 . . Dipeptidyl-peptidase III (3.4.14.4)  
 304/14005 . . Dipeptidyl-peptidase IV (3.4.14.5)  
 304/14006 . . Dipeptidyl-dipeptidase (3.4.14.6)  
 304/14008 . . Tripeptidyl peptidase (3.4.14.8) ([C12Y 304/14009](#), [C12Y 304/1401](#) take precedence)  
 304/14009 . . Tripeptidyl-peptidase I (3.4.14.9)  
 304/1401 . . Tripeptidyl-peptidase II (3.4.14.10)  
 304/14011 . . Xaa-Pro dipeptidyl-peptidase (3.4.14.11)  
 304/14012 . . Xaa-Xaa-Pro tripeptidyl-peptidase (3.4.14.12), i.e. prolyltri-peptidyl aminopeptidase  
 304/15 . Peptidyl-dipeptidases (3.4.15)  
 304/15001 . . Peptidyl-dipeptidase A (3.4.15.1)  
 304/15004 . . Peptidyl-dipeptidase B (3.4.15.4)  
 304/15005 . . Peptidyl-dipeptidase Dcp (3.4.15.5)  
 304/15006 . . Cyanophycinase (3.4.15.6)  
 304/16 . Serine-type carboxypeptidases (3.4.16)  
 304/16001 . . Serine carboxypeptidase (3.4.16.1) ([C12Y 304/16005](#), [C12Y 304/16006](#) take precedence)  
 304/16002 . . Lysosomal Pro-Xaa carboxypeptidase (3.4.16.2)  
 304/16004 . . Serine-type D-Ala-D-Ala carboxypeptidase (3.4.16.4)  
 304/16005 . . Carboxypeptidase C (3.4.16.5), i.e. carboxypeptidase Y  
 304/16006 . . Carboxypeptidase D (3.4.16.6)  
 304/17 . Metallo-carboxypeptidases (3.4.17)  
 304/17001 . . Carboxypeptidase A (3.4.17.1)  
 304/17002 . . Carboxypeptidase B (3.4.17.2)  
 304/17003 . . Lysine carboxypeptidase (3.4.17.3)  
 304/17004 . . Gly-Xaa carboxypeptidase (3.4.17.4)  
 304/17006 . . Alanine carboxypeptidase (3.4.17.6)  
 304/17008 . . Muramoylpentapeptide carboxypeptidase (3.4.17.8)  
 304/1701 . . Carboxypeptidase E (3.4.17.10)  
 304/17011 . . Glutamate carboxypeptidase (3.4.17.11)  
 304/17012 . . Carboxypeptidase M (3.4.17.12)  
 304/17013 . . Muramoyltetrapeptide carboxypeptidase (3.4.17.13)  
 304/17014 . . Zinc D-Ala-D-Ala carboxypeptidase (3.4.17.14)  
 304/17015 . . Carboxypeptidase A2 (3.4.17.15)  
 304/17016 . . Membrane Pro-Xaa carboxypeptidase (3.4.17.16)  
 304/17017 . . Tubuliny-Tyr carboxypeptidase (3.4.17.17)  
 304/17018 . . Carboxypeptidase T (3.4.17.18)  
 304/17019 . . Carboxypeptidase Taq (3.4.17.19)  
 304/1702 . . Carboxypeptidase U (3.4.17.20)  
 304/17021 . . Glutamate carboxypeptidase II (3.4.17.21)  
 304/17022 . . Metallo-carboxypeptidase D (3.4.17.22)  
 304/17023 . . Angiotensin-converting enzyme 2 (3.4.17.23)  
 304/18 . Cysteine-type carboxypeptidases (3.4.18)  
 304/18001 . . Cathepsin X (3.4.18.1)  
 304/19 . Omega peptidases (3.4.19)  
 304/19001 . . Acylaminoacyl-peptidase (3.4.19.1)  
 304/19002 . . Peptidyl-glycinamidase (3.4.19.2)  
 304/19003 . . Pyroglutamyl-peptidase I (3.4.19.3)  
 304/19005 . . Beta-aspartyl-peptidase (3.4.19.5)  
 304/19006 . . Pyroglutamyl-peptidase II (3.4.19.6)  
 304/19007 . . N-Formylmethionyl-peptidase (3.4.19.7)  
 304/19009 . . Gamma-glutamyl hydrolase (3.4.19.9)  
 304/19011 . . Gamma-D-glutamyl-meso-diaminopimelate peptidase (3.4.19.11)  
 304/19012 . . Ubiquitinyl hydrolase 1 (3.4.19.12)  
 304/19013 . . Glutathione hydrolase 1 (3.4.19.13)  
 304/19014 . . Leukotriene-C4 hydrolase (3.4.19.14)  
 304/21 . Serine endopeptidases (3.4.21)  
 304/21001 . . Chymotrypsin (3.4.21.1)  
 304/21002 . . Chymotrypsin C (3.4.21.2)  
 304/21003 . . Metridin (3.4.21.3)  
 304/21004 . . Trypsin (3.4.21.4)  
 304/21005 . . Thrombin (3.4.21.5)  
 304/21006 . . Coagulation factor Xa (3.4.21.6)



304/21007	. . Plasmin (3.4.21.7), i.e. fibrinolysin	304/21075	. . Furin (3.4.21.75)
304/21008	. . Kallikrein (3.4.21.8) ( <a href="#">C12Y 304/21034, C12Y 304/21035 take precedence</a> )	304/21076	. . Myeloblastin (3.4.21.76)
304/21009	. . Enteropeptidase (3.4.21.9), i.e. enterokinase	304/21077	. . Semenogelase (3.4.21.77), i.e. prostate specific antigen or PSA or kallikrein 3
304/2101	. . Acrosin (3.4.21.10)	304/21078	. . Granzyme A (3.4.21.78)
304/21011	. . Elastase (3.4.21.11) ( <a href="#">C12Y 304/21036, C12Y 304/21037 take precedence</a> )	304/21079	. . Granzyme B (3.4.21.79)
304/21012	. . Alpha-lytic endopeptidase (3.4.21.12)	304/2108	. . Streptogrisin A (3.4.21.80)
304/21014	. . Microbial serine proteases (3.4.21.14) ( <a href="#">C12Y 304/21062 - C12Y 304/21067 takes precedence</a> )	304/21081	. . Streptogrisin B (3.4.21.81)
304/21019	. . Glutamyl endopeptidase (3.4.21.19)	304/21082	. . Glutamyl endopeptidase II (3.4.21.82)
304/2102	. . Cathepsin G (3.4.21.20)	304/21083	. . Oligopeptidase B (3.4.21.83), i.e. trypsin-like protease
304/21021	. . Coagulation factor VIIa (3.4.21.21)	304/21084	. . limulus clotting factor C (3.4.21.84)
304/21022	. . Coagulation factor IXa (3.4.21.22)	304/21085	. . Limulus clotting factor B (3.4.21.85)
304/21025	. . Cucumisin (3.4.21.25)	304/21086	. . Limulus clotting enzyme (3.4.21.86)
304/21026	. . Prolyl oligopeptidase (3.4.21.26), i.e. proline-specific endopeptidase	304/21088	. . Repressor LexA (3.4.21.88)
304/21027	. . Coagulation factor XIa (3.4.21.27)	304/21089	. . Signal peptidase I (3.4.21.89)
304/21031	. . Urokinase (3.4.21.31) ( <a href="#">C12Y 304/21068, C12Y 304/21073 take precedence</a> )	304/2109	. . Togavirin (3.4.21.90)
304/21032	. . Brachyurin (3.4.21.32)	304/21091	. . Flavivirin (3.4.21.91)
304/21034	. . Plasma kallikrein (3.4.21.34)	304/21092	. . Endopeptidase Clp (3.4.21.92)
304/21035	. . Tissue kallikrein (3.4.21.35)	304/21093	. . Proprotein convertase 1 (3.4.21.93)
304/21036	. . Pancreatic elastase (3.4.21.36)	304/21094	. . Proprotein convertase 2 (3.4.21.94), i.e. prohormone convertase 2
304/21037	. . Leukocyte elastase (3.4.21.37), i.e. neutrophil-elastase	304/21095	. . Snake venom factor V activator (3.4.21.95)
304/21038	. . Coagulation factor XIIa (3.4.21.38)	304/21096	. . Lactocepin (3.4.21.96)
304/21039	. . Chymase (3.4.21.39)	304/21097	. . Assemblin (3.4.21.97)
304/21041	. . Complement subcomponent C1r (3.4.21.41)	304/21098	. . Hepacivirin (3.4.21.98)
304/21042	. . Complement subcomponent C1s (3.4.21.42)	304/21099	. . Spermosin (3.4.21.99)
304/21043	. . Classical-complement-pathway C3/C5 convertase (3.4.21.43)	304/211	. . Sedolisin (3.4.21.100)
304/21045	. . Complement factor I (3.4.21.45)	304/21101	. . Xanthomonalisin (3.4.21.101)
304/21046	. . Complement factor D (3.4.21.46)	304/21102	. . C-terminal processing peptidase (3.4.21.102)
304/21047	. . Alternative-complement-pathway C3/C5 convertase (3.4.21.47), i.e. properdin factor B	304/21103	. . Physarolisin (3.4.21.103), i.e. physaropepsin
304/21048	. . Cerevisin (3.4.21.48)	304/21104	. . Mannan-binding lectin-associated serine protease-2 (3.4.21.104)
304/21049	. . Hypodermin C (3.4.21.49)	304/21105	. . Rhomboid protease (3.4.21.105)
304/2105	. . Lysyl endopeptidase (3.4.21.50)	304/21106	. . Hepsin (3.4.21.106)
304/21053	. . Endopeptidase La (3.4.21.53)	304/21107	. . Peptidase Do (3.4.21.107)
304/21054	. . Gamma-renin (3.4.21.54)	304/21108	. . HtrA2 peptidase (3.4.21.108)
304/21055	. . Venombin AB (3.4.21.55)	304/21109	. . Matriptase (3.4.21.109)
304/21057	. . Leucyl endopeptidase (3.4.21.57)	304/2111	. . C5a peptidase (3.4.21.110)
304/21059	. . Trypsin (3.4.21.59)	304/21111	. . Aqualysin 1 (3.4.21.111)
304/2106	. . Scutellarin (3.4.21.60)	304/21112	. . Site-1 protease (3.4.21.112), i.e. subtilisin kexin isozyme-1
304/21061	. . Kexin (3.4.21.61), i.e. proprotein convertase subtilisin/kexin type 9	304/21113	. . Pestivirus NS3 polyprotein peptidase (3.4.21.113)
304/21062	. . Subtilisin (3.4.21.62)	304/21114	. . Equine arterivirus serine peptidase (3.4.21.114)
304/21063	. . Oryzin (3.4.21.63)	304/21115	. . Infectious pancreatic necrosis birnavirus Vp4 peptidase (3.4.21.115)
304/21064	. . Peptidase K (3.4.21.64)	304/21116	. . SpoIVB peptidase (3.4.21.116)
304/21065	. . Thermomycolin (3.4.21.65)	304/21117	. . Stratum corneum chymotryptic enzyme (3.4.21.117)
304/21066	. . Thermitase (3.4.21.66)	304/21118	. . Kallikrein 8 (3.4.21.118)
304/21067	. . Endopeptidase So (3.4.21.67)	304/21119	. . Kallikrein 13 (3.4.21.119)
304/21068	. . Tissue plasminogen activator (3.4.21.68), i.e. tPA	304/2112	. . Oviductin (3.4.21.120)
304/21069	. . Protein C activated (3.4.21.69)	304/21826	. . Proprotein convertase 5 (3.4.21.B26)
304/2107	. . Pancreatic endopeptidase E (3.4.21.70)	304/22	. . Cysteine endopeptidases (3.4.22)
304/21071	. . Pancreatic elastase II (3.4.21.71)	304/22001	. . Cathepsin B (3.4.22.1)
304/21072	. . IgA-specific serine endopeptidase (3.4.21.72)	304/22002	. . Papain (3.4.22.2)
304/21073	. . u-Plasminogen activator (3.4.21.73), i.e. urokinase	304/22003	. . Ficin (3.4.22.3)
304/21074	. . Venombin A (3.4.21.74)	304/22004	. . Bromelain (3.4.22.4) ( <a href="#">C12Y 304/22032, C12Y 304/22033 take precedence</a> )
		304/22006	. . Chymopapain (3.4.22.6)
		304/22007	. . Asclepain (3.4.22.7)
		304/22008	. . Clostripain (3.4.22.8)



304/2201	. . Streptopain (3.4.22.10)	304/23005	. . Cathepsin D (3.4.23.5)
304/22014	. . Actinidain (3.4.22.14)	304/23006	. . Microbial carboxyl proteinases (3.4.23.6) ( <a href="#">C12Y 304/23018</a> - <a href="#">C12Y 304/23028</a> , <a href="#">C12Y 304/2303</a> take precedence)
304/22015	. . Cathepsin L (3.4.22.15)	304/23012	. . Nepenthesin (3.4.23.12)
304/22016	. . Cathepsin H (3.4.22.16)	304/23015	. . Renin (3.4.23.15)
304/22017	. . Calpain (3.4.22.17) ( <a href="#">C12Y 304/22052</a> , <a href="#">C12Y 304/22053</a> take precedence)	304/23016	. . HIV-1 retropepsin (3.4.23.16)
304/22024	. . Cathepsin T (3.4.22.24)	304/23017	. . Pro-opiomelanocortin converting enzyme (3.4.23.17)
304/22025	. . Glycyl endopeptidase (3.4.22.25)	304/23018	. . Aspergillopepsin I (3.4.23.18)
304/22026	. . Cancer procoagulant (3.4.22.26)	304/23019	. . Aspergillopepsin II (3.4.23.19)
304/22027	. . Cathepsin S (3.4.22.27)	304/2302	. . Penicillopepsin (3.4.23.20)
304/22028	. . Picornain 3C (3.4.22.28)	304/23021	. . Rhizopuspepsin (3.4.23.21)
304/22029	. . Picornain 2A (3.4.22.29)	304/23022	. . Endothiapepsin (3.4.23.22)
304/2203	. . Caricain (3.4.22.30)	304/23023	. . Mucorpepsin (3.4.23.23)
304/22031	. . Ananain (3.4.22.31)	304/23024	. . Candidapepsin (3.4.23.24)
304/22032	. . Stem bromelain (3.4.22.32)	304/23025	. . Saccharopepsin (3.4.23.25), i.e. yeast proteinase A
304/22033	. . Fruit bromelain (3.4.22.33), i.e. juice bromelain	304/23026	. . Rhodotorulapepsin (3.4.23.26)
304/22034	. . Legumain (3.4.22.34), i.e. asparaginyl endopeptidase	304/23028	. . Acrocyllidopepsin (3.4.23.28)
304/22035	. . Histolysain (3.4.22.35)	304/23029	. . Polyporopepsin (3.4.23.29)
304/22036	. . Caspase-1 (3.4.22.36), i.e. interleukin-1-beta- convertase	304/2303	. . Pycnoporopepsin (3.4.23.30)
304/22037	. . Gingipain R (3.4.22.37)	304/23031	. . Scytalidopepsin A (3.4.23.31)
304/22038	. . Cathepsin K (3.4.22.38)	304/23032	. . Scytalidopepsin B (3.4.23.32)
304/22039	. . Adenain (3.4.22.39)	304/23034	. . Cathepsin E (3.4.23.34)
304/2204	. . Bleomycin hydrolase (3.4.22.40)	304/23035	. . Barrierpepsin (3.4.23.35)
304/22041	. . Cathepsin F (3.4.22.41)	304/23036	. . Signal peptidase II (3.4.23.36)
304/22042	. . Cathepsin O (3.4.22.42)	304/23038	. . Plasmepsin I (3.4.23.38)
304/22043	. . Cathepsin V (3.4.22.43)	304/23039	. . Plasmepsin II (3.4.23.39)
304/22044	. . Nuclear-inclusion-a endopeptidase (3.4.22.44)	304/2304	. . Phytpepsin (3.4.23.40)
304/22045	. . Helper-component proteinase (3.4.22.45)	304/23041	. . Yapsin 1 (3.4.23.41)
304/22046	. . L-Peptidase (3.4.22.46)	304/23042	. . Thermopsin (3.4.23.42)
304/22047	. . Gingipain K (3.4.22.47)	304/23043	. . Prepilin peptidase (3.4.23.43)
304/22048	. . Staphopain (3.4.22.48)	304/23044	. . Nodavirus endopeptidase (3.4.23.44)
304/22049	. . Separase (3.4.22.49)	304/23045	. . Memapsin 1 (3.4.23.45), i.e. beta-secretase 2 or BACE2
304/2205	. . V-Cath endopeptidase (3.4.22.50)	304/23046	. . Memapsin 2 (3.4.23.46), i.e. beta-secretase 1 or BACE
304/22051	. . Cruzipain (3.4.22.51)	304/23047	. . HIV-2 retropepsin (3.4.23.47)
304/22052	. . Calpain-1 (3.4.22.52)	304/23048	. . Plasminogen activator Pla (3.4.23.48)
304/22053	. . Calpain-2 (3.4.22.53), i.e. m-calpain	304/23049	. . Omptin (3.4.23.49)
304/22054	. . Calpain-3 (3.4.22.54), i.e. calpain p94	304/2305	. . Human endogenous retrovirus K endopeptidase (3.4.23.50)
304/22055	. . Caspase-2 (3.4.22.55)	304/23051	. . HycI peptidase (3.4.23.51)
304/22056	. . Caspase-3 (3.4.22.56)	304/23052	. . Preflagellin peptidase (3.4.23.52)
304/22057	. . Caspase-4 (3.4.22.57)	304/24	. . Metalloendopeptidases (3.4.24)
304/22058	. . Caspase-5 (3.4.22.58)	304/24001	. . Atrolysin A (3.4.24.1)
304/22059	. . Caspase-6 (3.4.22.59)	304/24003	. . Microbial collagenase (3.4.24.3)
304/2206	. . Caspase-7 (3.4.22.60)	304/24004	. . Microbial metalloproteinases (3.4.24.4) ( <a href="#">C12Y 304/24025</a> - <a href="#">C12Y 304/24032</a> , <a href="#">C12Y 304/24039</a> , <a href="#">C12Y 304/2404</a> take precedence)
304/22061	. . Caspase-8 (3.4.22.61)	304/24005	. . Lens neutral proteinase (3.4.24.5) ( <a href="#">C12Y 304/22052</a> , <a href="#">C12Y 304/22053</a> , <a href="#">C12Y 304/25001</a> take precedence)
304/22062	. . Caspase-9 (3.4.22.62)	304/24006	. . Leucolysin (3.4.24.6)
304/22063	. . Caspase-10 (3.4.22.63)	304/24007	. . Interstitial collagenase (3.4.24.7), i.e. matrix metalloprotease 1 or MMP1
304/22064	. . Caspase-11 (3.4.22.64)	304/24011	. . Neprilysin (3.4.24.11), i.e. enkephalinase or neutral endopeptidase 24.11
304/22065	. . Peptidase 1 (mite) (3.4.22.65)	304/24012	. . Envelysin (3.4.24.12)
304/22066	. . Calicivirin (3.4.22.66)	304/24013	. . IgA-specific metalloendopeptidase (3.4.24.13)
304/22067	. . Zingipain (3.4.22.67)		
304/22068	. . Ulp1 peptidase (3.4.22.68)		
304/22069	. . SARS coronavirus main proteinase (3.4.22.69)		
304/2207	. . Sortase A (3.4.22.70)		
304/22071	. . Sortase B (3.4.22.71)		
304/23	. . Aspartic endopeptidases (3.4.23)		
304/23001	. . Pepsin A (3.4.23.1)		
304/23002	. . Pepsin B (3.4.23.2)		
304/23003	. . Gastricsin (3.4.23.3)		
304/23004	. . Chymosin (3.4.23.4), i.e. rennin		

- 304/24014 . . Procollagen N-endorpeptidase (3.4.24.14)  
 304/24015 . . Thimet oligopeptidase (3.4.24.15)  
 304/24016 . . Neurolysin (3.4.24.16)  
 304/24017 . . Stromelysin 1 (3.4.24.17)  
 304/24018 . . Meprin A (3.4.24.18)  
 304/24019 . . Procollagen C-endorpeptidase (3.4.24.19)  
 304/2402 . . Peptidyl-Lys metalloendorpeptidase (3.4.24.20)  
 304/24021 . . Astacin (3.4.24.21)  
 304/24022 . . Stromelysin 2 (3.4.24.22)  
 304/24023 . . Matrilysin (3.4.24.23)  
 304/24024 . . Gelatinase A (3.4.24.24), i.e. matrix metalloproteinase 2 or MMP2  
 304/24025 . . Vibriolysin (3.4.24.25)  
 304/24026 . . Pseudolysin (3.4.24.26)  
 304/24027 . . Thermolysin (3.4.24.27)  
 304/24028 . . Bacillolysin (3.4.24.28)  
 304/24029 . . Aureolysin (3.4.24.29)  
 304/2403 . . Coccolysin (3.4.24.30)  
 304/24031 . . Mycolysin (3.4.24.31)  
 304/24032 . . Beta-lytic metalloendorpeptidase (3.4.24.32)  
 304/24033 . . Peptidyl-Asp metalloendorpeptidase (3.4.24.33)  
 304/24034 . . Neutrophil collagenase (3.4.24.34)  
 304/24035 . . Gelatinase B (3.4.24.35), i.e. matrix metalloproteinase 9 or MMP9  
 304/24036 . . Leishmanolysin (3.4.24.36)  
 304/24037 . . Saccharolysin (3.4.24.37), i.e. yeast cysteine proteinase D  
 304/24038 . . Gametolysin (3.4.24.38), i.e. cell wall lytic enzyme  
 304/24039 . . Deuterolysin (3.4.24.39)  
 304/2404 . . Serralysin (3.4.24.40)  
 304/24041 . . Atrolysin B (3.4.24.41)  
 304/24042 . . Atrolysin C (3.4.24.42)  
 304/24043 . . Atroxase (3.4.24.43)  
 304/24044 . . Atrolysin E (3.4.24.44)  
 304/24045 . . Atrolysin F (3.4.24.45)  
 304/24046 . . Adamalysin (3.4.24.46)  
 304/24047 . . Horrilysin (3.4.24.47)  
 304/24048 . . Ruberlysin (3.4.24.48)  
 304/24049 . . Bothropasin (3.4.24.49)  
 304/2405 . . Bothrolysin (3.4.24.50)  
 304/24051 . . Ophiolysin (3.4.24.51)  
 304/24052 . . Trimerelysin I (3.4.24.52)  
 304/24053 . . Trimerelysin II (3.4.24.53)  
 304/24054 . . Mucrolysin (3.4.24.54)  
 304/24055 . . Pitrilysin (3.4.24.55)  
 304/24056 . . Insulysin (3.4.24.56)  
 304/24057 . . O-Sialoglycoprotein endopeptidase (3.4.24.57), i.e. glycoproteinase  
 304/24058 . . Russellysin (3.4.24.58)  
 304/24059 . . Mitochondrial intermediate peptidase (3.4.24.59)  
 304/2406 . . Dactylisin (3.4.24.60)  
 304/24061 . . Nardilysin (3.4.24.61)  
 304/24062 . . Magnolysin (3.4.24.62)  
 304/24063 . . Meprin B (3.4.24.63)  
 304/24064 . . Mitochondrial processing peptidase (3.4.24.64)  
 304/24065 . . Macrophage elastase (3.4.24.65), i.e. metalloelastase  
 304/24066 . . Choriolysin L (3.4.24.66)  
 304/24067 . . Choriolysin H (3.4.24.67)  
 304/24068 . . Tentoxilysin (3.4.24.68), i.e. tetanus neurotoxin  
 304/24069 . . Bontoxilysin (3.4.24.69), i.e. botulinum neurotoxin  
 304/2407 . . Oligopeptidase A (3.4.24.70)  
 304/24071 . . Endothelin-converting enzyme 1 (3.4.24.71)  
 304/24072 . . Fibrolase (3.4.24.72)  
 304/24073 . . Jararhagin (3.4.24.73)  
 304/24074 . . Fragilysin (3.4.24.74)  
 304/24075 . . Lysostaphin (3.4.24.75)  
 304/24076 . . Flavastacin (3.4.24.76)  
 304/24077 . . Snapalysin (3.4.24.77)  
 304/24078 . . GPR endopeptidase (3.4.24.78)  
 304/24079 . . Pappalysin-1 (3.4.24.79)  
 304/2408 . . Membrane-type matrix metalloproteinase-1 (3.4.24.80)  
 304/24081 . . ADAM10 endopeptidase (3.4.24.81)  
 304/24082 . . ADAMTS-4 endopeptidase (3.4.24.82), i.e. aggrecanase 1  
 304/24083 . . Anthrax lethal factor endopeptidase (3.4.24.83)  
 304/24084 . . Ste24 endopeptidase (3.4.24.84)  
 304/24085 . . S2P endopeptidase (3.4.24.85)  
 304/24086 . . ADAM 17 endopeptidase (3.4.24.86), i.e. TNF-alpha converting enzyme  
 304/24087 . . ADAMTS13 endopeptidase (3.4.24.87)  
 304/24812 . . ADAMTS5 endopeptidase (3.4.24.B12), i.e. aggrecanase 2  
 304/25 . . Threonine endopeptidases (3.4.25)  
 304/25001 . . Proteasome endopeptidase complex (3.4.25.1)  
 304/25002 . . HslU--HslIV peptidase (3.4.25.2)  
**305/00 Hydrolases acting on carbon-nitrogen bonds, other than peptide bonds (3.5)**  
 305/01 . . in linear amides (3.5.1)  
 305/01001 . . Asparaginase (3.5.1.1)  
 305/01002 . . Glutaminase (3.5.1.2)  
 305/01003 . . Omega-amidase (3.5.1.3)  
 305/01004 . . Amidase (3.5.1.4)  
 305/01005 . . Urease (3.5.1.5)  
 305/01006 . . Beta-ureidopropionase (3.5.1.6)  
 305/01007 . . Ureidosuccinase (3.5.1.7)  
 305/01008 . . Formylaspartate deformylase (3.5.1.8)  
 305/01009 . . Arylformamidase (3.5.1.9)  
 305/0101 . . Formyltetrahydrofolate deformylase (3.5.1.10)  
 305/01011 . . Penicillin amidase (3.5.1.11), i.e. penicillin-amidohydrolase  
 305/01012 . . Biotinidase (3.5.1.12)  
 305/01013 . . Aryl-acylamidase (3.5.1.13)  
 305/01014 . . Aminoacylase (3.5.1.14)  
 305/01015 . . Aspartoacylase (3.5.1.15)  
 305/01016 . . Acetylornithine deacetylase (3.5.1.16)  
 305/01017 . . Acyl-lysine deacylase (3.5.1.17)  
 305/01018 . . Succinyl-diaminopimelate desuccinylase (3.5.1.18)  
 305/01019 . . Nicotinamidase (3.5.1.19)  
 305/0102 . . Citrullinase (3.5.1.20)  
 305/01021 . . N-Acetyl-beta-alanine deacetylase (3.5.1.21)  
 305/01022 . . Pantothenase (3.5.1.22)  
 305/01023 . . Ceramidase (3.5.1.23)  
 305/01024 . . Choloylglycine hydrolase (3.5.1.24), i.e. bile salt hydrolase  
 305/01025 . . N-Acetylglucosamine-6-phosphate deacetylase (3.5.1.25)  
 305/01026 . . N4-(Beta-N-acetylglucosaminyl)-L-asparaginase (3.5.1.26)

305/01027	. . N-Formylmethionylaminoacyl-tRNA deformylase (3.5.1.27)	305/01083	. . N-Acyl-D-aspartate deacylase (3.5.1.83)
305/01028	. . N-Acetylmuramoyl-L-alanine amidase (3.5.1.28)	305/01084	. . Biuret amidohydrolase (3.5.1.84)
305/01029	. . 2-(Acetamidomethylene)succinate hydrolase (3.5.1.29)	305/01085	. . (S)-N-Acetyl-1-phenylethylamine hydrolase (3.5.1.85)
305/0103	. . 5-Aminopentanamide (3.5.1.30)	305/01086	. . Mandelamide amidase (3.5.1.86)
305/01031	. . Formylmethionine deformylase (3.5.1.31)	305/01087	. . N-Carbamoyl-L-amino-acid hydrolase (3.5.1.87)
305/01032	. . Hippurate hydrolase (3.5.1.32)	305/01088	. . Peptide deformylase (3.5.1.88)
305/01033	. . N-Acetylglucosamine deacetylase (3.5.1.33)	305/01089	. . N-Acetylglucosaminylphosphatidylinositol deacetylase (3.5.1.89)
305/01035	. . D-Glutaminase (3.5.1.35)	305/0109	. . Adenosylcobinamide hydrolase (3.5.1.90)
305/01036	. . N-Methyl-2-oxoglutarate hydrolase (3.5.1.36)	305/01091	. . N-Substituted formamide deformylase (3.5.1.91)
305/01038	. . Glutamin-(asparagin-)-ase (3.5.1.38)	305/01092	. . Pantetheine hydrolase (3.5.1.92)
305/01039	. . Alkylamidase (3.5.1.39)	305/01093	. . Glutaryl-7-aminocephalosporanic-acid acylase (3.5.1.93)
305/0104	. . Acylagmatine amidase (3.5.1.40)	305/01094	. . Gamma-glutamyl-gamma-aminobutyrate hydrolase (3.5.1.94)
305/01041	. . Chitin deacetylase (3.5.1.41)	305/01095	. . N-Malonylurea hydrolase (3.5.1.95)
305/01042	. . Nicotinamide-nucleotide amidase (3.5.1.42)	305/01096	. . Succinylglutamate desuccinylase (3.5.1.96)
305/01043	. . Peptidyl-glutaminase (3.5.1.43)	305/01097	. . Acyl-homoserine-lactone acylase (3.5.1.97)
305/01044	. . Protein-glutamine glutaminase (3.5.1.44)	305/01098	. . Histone deacetylase (3.5.1.98), i.e. sirtuin deacetylase
305/01046	. . 6-Aminohexanoate-dimer hydrolase (3.5.1.46)	305/01099	. . Fatty acid amide hydrolase (3.5.1.99)
305/01047	. . N-Acetyldiaminopimelate deacetylase (3.5.1.47)	305/011	. . (R)-Amidase (3.5.1.100)
305/01048	. . Acetylspermidine deacetylase (3.5.1.48)	305/01101	. . L-Proline amide hydrolase (3.5.1.101)
305/01049	. . Formamidase (3.5.1.49)	305/01102	. . 2-Amino-5-formylamino-6-ribosylaminopyrimidin-4(3H)-one 5'-monophosphate deformylase (3.5.1.102)
305/0105	. . Pentanamidase (3.5.1.50)	305/01103	. . N-Acetyl-1-D-myo-inositol-2-amino-2-deoxy-alpha-D-glucopyranoside deacetylase (3.5.1.103)
305/01051	. . 4-Acetamidobutyryl-CoA deacetylase (3.5.1.51)	305/01104	. . Peptidoglycan-N-acetylglucosamine deacetylase (3.5.1.104)
305/01052	. . Peptide-N <sub>4</sub> -(N-acetyl-beta-glucosaminyl)asparagine amidase (3.5.1.52), i.e. glycopeptidase	305/01105	. . Chitin disaccharide deacetylase (3.5.1.105)
305/01053	. . N-carbamoylputrescine amidase (3.5.1.53)	305/01106	. . N-formylmaleamate deformylase (3.5.1.106)
305/01054	. . Allophanate hydrolase (3.5.1.54)	305/01107	. . Maleamate amidohydrolase (3.5.1.107)
305/01055	. . Long-chain-fatty-acyl-glutamate deacylase (3.5.1.55)	305/01108	. . UDP-3-O-acyl-N-acetylglucosamine deacetylase (3.5.1.108)
305/01056	. . N,N-Dimethylformamidase (3.5.1.56)	305/01109	. . Sphingomyelin deacylase (3.5.1.109)
305/01057	. . Tryptophanamidase (3.5.1.57)	305/0111	. . Peroxyureidoacrylate/ureidoacrylate amidohydrolase (3.5.1.110)
305/01058	. . N-Benzoyloxycarbonylglycine hydrolase (3.5.1.58)	305/01111	. . 2-Oxoglutarate amidase (3.5.1.111)
305/01059	. . N-Carbamoylsarcosine amidase (3.5.1.59)	305/01112	. . 2'-N-Acetylparomamine deacetylase (3.5.1.112)
305/0106	. . N-(Long-chain-acyl)ethanolamine deacylase (3.5.1.60)	305/01113	. . 2'''-Acetyl-6'''-hydroxyneomycin C deacetylase (3.5.1.113)
305/01061	. . Mimosinase (3.5.1.61)	305/02	. . in cyclic amides (3.5.2)
305/01062	. . Acetylputrescine deacetylase (3.5.1.62)	305/02001	. . Barbiturase (3.5.2.1)
305/01063	. . 4-Acetamidobutyrate deacetylase (3.5.1.63)	305/02002	. . Dihydropyrimidinase (3.5.2.2), i.e. hydantoinase
305/01064	. . Nalpa-benzoyloxycarbonylleucine hydrolase (3.5.1.64)	305/02003	. . Dihydroorotase (3.5.2.3)
305/01065	. . Theanine hydrolase (3.5.1.65)	305/02004	. . Carboxymethylhydantoinase (3.5.2.4)
305/01066	. . 2-(Hydroxymethyl)-3-(acetamidomethylene)succinate hydrolase (3.5.1.66)	305/02005	. . Allantoinase (3.5.2.5)
305/01067	. . 4-Methyleneglutaminase (3.5.1.67)	305/02006	. . Beta-lactamase (3.5.2.6)
305/01068	. . N-Formylglutamate deformylase (3.5.1.68)	305/02007	. . Imidazolonepropionase (3.5.2.7)
305/01069	. . Glycosphingolipid deacylase (3.5.1.69)	305/02009	. . 5-Oxoprolinase (ATP-hydrolysing) (3.5.2.9)
305/0107	. . Aculeacin-A deacylase (3.5.1.70)	305/0201	. . Creatininase (3.5.2.10)
305/01071	. . N-Feruloylglycine deacylase (3.5.1.71)	305/02011	. . L-Lysine-lactamase (3.5.2.11)
305/01072	. . D-Benzoylarginine-4-nitroanilide amidase (3.5.1.72)	305/02012	. . 6-Aminohexanoate-cyclic-dimer hydrolase (3.5.2.12)
305/01073	. . Carnitinamidase (3.5.1.73)	305/02013	. . 2,5-Dioxopiperazine hydrolase (3.5.2.13)
305/01074	. . Chenodeoxycholytaurine hydrolase (3.5.1.74)	305/02014	. . N-Methylhydantoinase (ATP-hydrolyzing) (3.5.2.14)
305/01075	. . Urethanase (3.5.1.75)	305/02015	. . Cyanuric acid amidohydrolase (3.5.2.15)
305/01076	. . Arylalkyl acylamidase (3.5.1.76)	305/02016	. . Maleimide hydrolase (3.5.2.16)
305/01077	. . N-Carbamoyl-D-amino-acid hydrolase (3.5.1.77)	305/02017	. . Hydroxyisourate hydrolase (3.5.2.17)
305/01078	. . Glutathionylspermidine amidase (3.5.1.78)		
305/01079	. . Phthalyl amidase (3.5.1.79)		
305/01081	. . N-Acyl-D-amino-acid deacylase (3.5.1.81)		
305/01082	. . N-Acyl-D-glutamate deacylase (3.5.1.82)		

- 305/02018 . . Enamidase (3.5.2.18)  
 305/02019 . . Streptothricin hydrolase (3.5.2.19)  
 305/03 . . in linear amidines (3.5.3)  
 305/03001 . . Arginase (3.5.3.1)  
 305/03002 . . Guanidinoacetase (3.5.3.2)  
 305/03003 . . Creatinase (3.5.3.3), i.e. creatine amidinohydrolase  
 305/03004 . . Allantoicase (3.5.3.4)  
 305/03005 . . Formimidoylaspartate deiminase (3.5.3.5)  
 305/03006 . . Arginine deiminase (3.5.3.6)  
 305/03007 . . Guanidinobutyrase (3.5.3.7)  
 305/03008 . . Formimidoylglutamase (3.5.3.8)  
 305/03009 . . Allantoate deiminase (3.5.3.9)  
 305/0301 . . D-Arginase (3.5.3.10)  
 305/03011 . . Agmatinase (3.5.3.11)  
 305/03012 . . Agmatine deiminase (3.5.3.12)  
 305/03013 . . Formimidoylglutamate deiminase (3.5.3.13)  
 305/03014 . . Amidinoaspartase (3.5.3.14)  
 305/03015 . . Protein-arginine deiminase (3.5.3.15)  
 305/03016 . . Methylguanidinase (3.5.3.16)  
 305/03017 . . Guanidinopropionase (3.5.3.17)  
 305/03018 . . Dimethylargininase (3.5.3.18)  
 305/03019 . . Ureidoglycolate hydrolase (3.5.3.19)  
 305/0302 . . Diguanidinobutanase (3.5.3.20)  
 305/03021 . . Methylenediurea deaminase (3.5.3.21)  
 305/03022 . . Proclavaminase amidinohydrolase (3.5.3.22)  
 305/03023 . . N-Succinylarginine dihydrolase (3.5.3.23)  
 305/04 . . in cyclic amidines (3.5.4)  
 305/04001 . . Cytosine deaminase (3.5.4.1)  
 305/04002 . . Adenine deaminase (3.5.4.2)  
 305/04003 . . Guanine deaminase (3.5.4.3)  
 305/04004 . . Adenosine deaminase (3.5.4.4)  
 305/04005 . . Cytidine deaminase (3.5.4.5)  
 305/04006 . . AMP deaminase (3.5.4.6)  
 305/04007 . . ADP deaminase (3.5.4.7)  
 305/04008 . . Aminoimidazolase (3.5.4.8)  
 305/04009 . . Methenyltetrahydrofolate cyclohydrolase (3.5.4.9)  
 305/0401 . . IMP cyclohydrolase (3.5.4.10)  
 305/04011 . . Pterin deaminase (3.5.4.11)  
 305/04012 . . dCMP deaminase (3.5.4.12)  
 305/04013 . . dCTP deaminase (3.5.4.13)  
 305/04014 . . Deoxycytidine deaminase (3.5.4.14)  
 305/04015 . . Guanosine deaminase (3.5.4.15)  
 305/04016 . . GTP cyclohydrolase I (3.5.4.16)  
 305/04017 . . Adenosine-phosphate deaminase (3.5.4.17)  
 305/04018 . . ATP deaminase (3.5.4.18)  
 305/04019 . . Phosphoribosyl-AMP cyclohydrolase (3.5.4.19)  
 305/0402 . . Pyrithiamine deaminase (3.5.4.20)  
 305/04021 . . Creatinine deaminase (3.5.4.21)  
 305/04022 . . 1-Pyrroline-4-hydroxy-2-carboxylate deaminase (3.5.4.22)  
 305/04023 . . Blasticidin-S deaminase (3.5.4.23)  
 305/04024 . . Sepiapterin deaminase (3.5.4.24)  
 305/04025 . . GTP cyclohydrolase II (3.5.4.25)  
 305/04026 . . Diaminohydroxyphosphoribosylaminopyrimidine deaminase (3.5.4.26)  
 305/04027 . . Methenyltetrahydromethanopterin cyclohydrolase (3.5.4.27)  
 305/04028 . . S-Adenosylhomocysteine deaminase (3.5.4.28)  
 305/04029 . . GTP cyclohydrolase IIa (3.5.4.29)  
 305/0403 . . dCTP deaminase (dUMP-forming) (3.5.4.30)  
 305/04031 . . S-Methyl-5'-thioadenosine deaminase (3.5.4.31)  
 305/04032 . . 8-Oxoguanine deaminase (3.5.4.32)  
 305/05 . . in nitriles (3.5.5)  
 305/05001 . . Nitrilase (3.5.5.1)  
 305/05002 . . Ricinine nitrilase (3.5.5.2)  
 305/05004 . . Cyanoalanine nitrilase (3.5.5.4)  
 305/05005 . . Arylacetonitrilase (3.5.5.5)  
 305/05006 . . Bromoxynil nitrilase (3.5.5.6)  
 305/05007 . . Aliphatic nitrilase (3.5.5.7)  
 305/05008 . . Thiocyanate hydrolase (3.5.5.8)  
 305/99 . . in other compounds (3.5.99)  
 305/99001 . . Riboflavinase (3.5.99.1)  
 305/99002 . . Thiaminase (3.5.99.2)  
 305/99003 . . Hydroxydechloroatrazine ethylaminohydrolase (3.5.99.3)  
 305/99004 . . N-isopropylammelide isopropylaminohydrolase (3.5.99.4)  
 305/99005 . . 2-Aminomuconate deaminase (3.5.99.5)  
 305/99006 . . Glucosamine-6-phosphate deaminase (3.5.99.6)  
 305/99007 . . 1-Aminocyclopropane-1-carboxylate deaminase (3.5.99.7)  
 305/99008 . . 5-Nitroanthranilic acid aminohydrolase (3.5.99.8)  
 305/99009 . . 2-Nitroimidazole nitrohydrolase (3.5.99.9)
- 306/00 Hydrolases acting on acid anhydrides (3.6)**  
 306/01 . . in phosphorus-containing anhydrides (3.6.1)  
 306/01001 . . Inorganic diphosphatase (3.6.1.1)  
 306/01002 . . Trimetaphosphatase (3.6.1.2)  
 306/01003 . . Adenosine triphosphatase (3.6.1.3)  
 306/01005 . . Apyrase (3.6.1.5), i.e. ATP diphosphohydrolase  
 306/01006 . . Nucleoside-diphosphatase (3.6.1.6)  
 306/01007 . . Acylphosphatase (3.6.1.7)  
 306/01008 . . ATP diphosphatase (3.6.1.8)  
 306/01009 . . Nucleotide diphosphatase (3.6.1.9), i.e. nucleotide-pyrophosphatase  
 306/0101 . . Endopolyphosphatase (3.6.1.10)  
 306/01011 . . Exopolyphosphatase (3.6.1.11)  
 306/01012 . . dCTP diphosphatase (3.6.1.12)  
 306/01013 . . ADP-ribose diphosphatase (3.6.1.13)  
 306/01014 . . Adenosine-tetraphosphatase (3.6.1.14)  
 306/01015 . . Nucleoside-triphosphatase (3.6.1.15)  
 306/01016 . . CDP-glycerol diphosphatase (3.6.1.16)  
 306/01017 . . Bis(5'-nucleosyl)-tetraphosphatase (asymmetrical) (3.6.1.17)  
 306/01018 . . FAD diphosphatase (3.6.1.18)  
 306/01019 . . Nucleoside-triphosphate diphosphatase (3.6.1.19)  
 306/0102 . . 5'-Acylphosphoadenosine hydrolase (3.6.1.20)  
 306/01021 . . ADP-sugar diphosphatase (3.6.1.21)  
 306/01022 . . NAD<sup>+</sup> diphosphatase (3.6.1.22)  
 306/01023 . . dUTP diphosphatase (3.6.1.23)  
 306/01024 . . Nucleoside phosphoacylhydrolase (3.6.1.24)  
 306/01025 . . Triphosphatase (3.6.1.25)  
 306/01026 . . CDP-diacylglycerol diphosphatase (3.6.1.26)  
 306/01027 . . Undecaprenyl-diphosphate phosphatase (3.6.1.27)  
 306/01028 . . Thiamine-triphosphatase (3.6.1.28)  
 306/01029 . . Bis(5'-adenosyl)-triphosphatase (3.6.1.29)  
 306/0103 . . m7G(5')pppN diphosphatase (3.6.1.30)  
 (C12Y 306/01059 and C12Y 306/01062 take precedence)  
 306/01031 . . Phosphoribosyl-ATP diphosphatase (3.6.1.31)  
 306/01039 . . Thymidine-triphosphatase (3.6.1.39), i.e. T4 helicase

- 306/0104 . . Guanosine-5'-triphosphate,3'-diphosphate diphosphatase (3.6.1.40)
- 306/01041 . . Bis(5'-nucleosyl)-tetraphosphatase (symmetrical) (3.6.1.41)
- 306/01042 . . Guanosine-diphosphatase (3.6.1.42)
- 306/01043 . . Dolichyldiphosphatase (3.6.1.43)
- 306/01044 . . Oligosaccharide-diphosphodolichol diphosphatase (3.6.1.44)
- 306/01045 . . UDP-sugar diphosphatase (3.6.1.45)
- 306/01052 . . Diphosphoinositol-polyphosphate diphosphatase (3.6.1.52)
- 306/01053 . . Mn<sup>2+</sup>-dependent ADP-ribose/CDP-alcohol diphosphatase (3.6.1.53)
- 306/01054 . . UDP-2,3-diacylglucosamine diphosphatase (3.6.1.54)
- 306/01055 . . 8-Oxo-dGTP diphosphatase (3.6.1.55)
- 306/01056 . . 2-Hydroxy-dATP diphosphatase (3.6.1.56)
- 306/01057 . . UDP-2,4-diacetamido-2,4,6-trideoxy-beta-L-altropyranose hydrolase (3.6.1.57)
- 306/01058 . . 8-Oxo-dGDP phosphatase (3.6.1.58)
- 306/01059 . . m7GpppX diphosphatase (3.6.1.59)
- 306/0106 . . Diadenosine hexaphosphate hydrolase (AMP-forming) (3.6.1.60)
- 306/01061 . . Diadenosine hexaphosphate hydrolase (ATP-forming) (3.6.1.61)
- 306/01062 . . m7GpppN-mRNA hydrolase (3.6.1.62)
- 306/01063 . . Alpha-D-ribose 1-methylphosphonate 5-triphosphate diphosphatase (3.6.1.63)
- 306/02 . . in sulfonyl-containing anhydrides (3.6.2)
- 306/02001 . . Adenylylsulfatase (3.6.2.1)
- 306/02002 . . Phosphoadenylylsulfatase (3.6.2.2)
- 306/03 . . acting on acid anhydrides; catalysing transmembrane movement of substances (3.6.3)
- 306/03001 . . Phospholipid-translocating ATPase (3.6.3.1), i.e Mg<sup>2+</sup>-ATPase
- 306/03002 . . Mg<sup>2+</sup>-importing ATPase (3.6.3.2)
- 306/03003 . . Cd<sup>2+</sup>-exporting ATPase (3.6.3.3)
- 306/03004 . . Cu<sup>2+</sup>-exporting ATPase (3.6.3.4)
- 306/03005 . . Zn<sup>2+</sup>-exporting ATPase (3.6.3.5)
- 306/03006 . . H<sup>+</sup>-exporting ATPase (3.6.3.6)
- 306/03007 . . Na<sup>+</sup>-exporting ATPase (3.6.3.7)
- 306/03008 . . Ca<sup>2+</sup>-transporting ATPase (3.6.3.8)
- 306/03009 . . Na<sup>+</sup>/K<sup>+</sup>-exchanging ATPase (3.6.3.9)
- 306/0301 . . H<sup>+</sup>/K<sup>+</sup>-exchanging ATPase (3.6.3.10)
- 306/03011 . . Cl<sup>-</sup>-transporting ATPase (3.6.3.11)
- 306/03012 . . K<sup>+</sup>-transporting ATPase (3.6.3.12)
- 306/03014 . . H<sup>+</sup>-transporting two-sector ATPase (3.6.3.14), i.e. F1 ATPase
- 306/03015 . . Na<sup>+</sup>-transporting two-sector ATPase (3.6.3.15)
- 306/03016 . . Arsenite-transporting ATPase (3.6.3.16)
- 306/03017 . . Monosaccharide-transporting ATPase (3.6.3.17)
- 306/03018 . . Oligosaccharide-transporting ATPase (3.6.3.18)
- 306/03019 . . Maltose-transporting ATPase (3.6.3.19)
- 306/0302 . . Glycerol-3-phosphate-transporting ATPase (3.6.3.20)
- 306/03021 . . Polar-amino-acid-transporting ATPase (3.6.3.21)
- 306/03022 . . Nonpolar-amino-acid-transporting ATPase (3.6.3.22)
- 306/03023 . . Oligopeptide-transporting ATPase (3.6.3.23)
- 306/03024 . . Nickel-transporting ATPase (3.6.3.24)
- 306/03025 . . Sulfate-transporting ATPase (3.6.3.25)
- 306/03026 . . Nitrate-transporting ATPase (3.6.3.26)
- 306/03027 . . Phosphate-transporting ATPase (3.6.3.27)
- 306/03028 . . Phosphonate-transporting ATPase (3.6.3.28)
- 306/03029 . . Molybdate-transporting ATPase (3.6.3.29)
- 306/0303 . . Fe<sup>3+</sup>-transporting ATPase (3.6.3.30)
- 306/03031 . . Polyamine-transporting ATPase (3.6.3.31)
- 306/03032 . . Quaternary-amine-transporting ATPase (3.6.3.32)
- 306/03033 . . Vitamin B12-transporting ATPase (3.6.3.33)
- 306/03034 . . Iron-chelate-transporting ATPase (3.6.3.34)
- 306/03035 . . Manganese-transporting ATPase (3.6.3.35)
- 306/03036 . . Taurine-transporting ATPase (3.6.3.36)
- 306/03037 . . Guanine-transporting ATPase (3.6.3.37)
- 306/03038 . . Capsular-polysaccharide-transporting ATPase (3.6.3.38)
- 306/03039 . . Lipopolysaccharide-transporting ATPase (3.6.3.39)
- 306/0304 . . Teichoic-acid-transporting ATPase (3.6.3.40)
- 306/03041 . . Heme-transporting ATPase (3.6.3.41)
- 306/03042 . . Beta-glucan-transporting ATPase (3.6.3.42)
- 306/03043 . . Peptide-transporting ATPase (3.6.3.43)
- 306/03044 . . Xenobiotic-transporting ATPase (3.6.3.44)
- 306/03046 . . Cadmium-transporting ATPase (3.6.3.46)
- 306/03047 . . Fatty-acyl-CoA-transporting ATPase (3.6.3.47)
- 306/03048 . . Alpha-factor-transporting ATPase (3.6.3.48)
- 306/03049 . . Channel-conductance-controlling ATPase (3.6.3.49)
- 306/0305 . . Protein-secreting ATPase (3.6.3.50)
- 306/03051 . . Mitochondrial protein-transporting ATPase (3.6.3.51)
- 306/03052 . . Chloroplast protein-transporting ATPase (3.6.3.52)
- 306/03053 . . Ag<sup>+</sup>-exporting ATPase (3.6.3.53)
- 306/04 . . acting on acid anhydrides; involved in cellular and subcellular movement (3.6.4)
- 306/04001 . . Myosin ATPase (3.6.4.1)
- 306/04002 . . Dynein ATPase (3.6.4.2)
- 306/04003 . . Microtubule-severing ATPase (3.6.4.3)
- 306/04004 . . Plus-end-directed kinesin ATPase (3.6.4.4)
- 306/04005 . . Minus-end-directed kinesin ATPase (3.6.4.5)
- 306/04006 . . Vesicle-fusing ATPase (3.6.4.6)
- 306/04007 . . Peroxisome-assembly ATPase (3.6.4.7)
- 306/04008 . . Proteasome ATPase (3.6.4.8)
- 306/04009 . . Chaperonin ATPase (3.6.4.9)
- 306/0401 . . Non-chaperonin molecular chaperone ATPase (3.6.4.10)
- 306/04011 . . Nucleoplasmin ATPase (3.6.4.11)
- 306/04012 . . DNA helicase (3.6.4.12)
- 306/04013 . . RNA helicase (3.6.4.13)
- 306/05 . . acting on GTP; involved in cellular and subcellular movement (3.6.5)
- 306/05001 . . Heterotrimeric G-protein GTPase (3.6.5.1)
- 306/05002 . . Small monomeric GTPase (3.6.5.2)
- 306/05003 . . Protein-synthesizing GTPase (3.6.5.3)
- 306/05004 . . Signal-recognition-particle GTPase (3.6.5.4)
- 306/05005 . . Dynamin GTPase (3.6.5.5)
- 306/05006 . . Tubulin GTPase (3.6.5.6)
- 307/00 Hydrolases acting on carbon-carbon bonds (3.7)**
- 307/01 . . in ketonic substances (3.7.1)
- 307/01001 . . Oxaloacetase (3.7.1.1)
- 307/01002 . . Fumarylacetoacetase (3.7.1.2)
- 307/01003 . . Kynureninase (3.7.1.3)
- 307/01004 . . Phloretin hydrolase (3.7.1.4)
- 307/01005 . . Acylpyruvate hydrolase (3.7.1.5)

307/01006	. . Acetylpyruvate hydrolase (3.7.1.6)	401/01	. Carboxy-lyases (4.1.1)
307/01007	. . Beta-diketone hydrolase (3.7.1.7)	401/01001	. . Pyruvate decarboxylase (4.1.1.1)
307/01008	. . 2,6-Dioxo-6-phenylhexa-3-enoate hydrolase (3.7.1.8)	401/01002	. . Oxalate decarboxylase (4.1.1.2)
307/01009	. . 2-Hydroxymuconate-semialdehyde hydrolase (3.7.1.9)	401/01003	. . Oxaloacetate decarboxylase (4.1.1.3)
307/0101	. . Cyclohexane-1,3-dione hydrolase (3.7.1.10)	401/01004	. . Acetoacetate decarboxylase (4.1.1.4)
307/01011	. . Cyclohexane-1,2-dione hydrolase (3.7.1.11)	401/01005	. . Acetolactate decarboxylase (4.1.1.5)
307/01012	. . Cobalt-precorrin 5A hydrolase (3.7.1.12)	401/01006	. . Aconitate decarboxylase (4.1.1.6)
307/01013	. . 2-Hydroxy-6-oxo-6-(2-aminophenyl)hexa-2,4-dienoate hydrolase (3.7.1.13)	401/01007	. . Benzoylformate decarboxylase (4.1.1.7)
307/01014	. . 2-Hydroxy-6-oxonona-2,4-dienedioate hydrolase (3.7.1.14)	401/01008	. . Oxalyl-CoA decarboxylase (4.1.1.8)
307/01015	. . (+)-Caryolan-1-ol synthase (3.7.1.15)	401/01009	. . Malonyl-CoA decarboxylase (4.1.1.9)
307/01016	. . Oxepin-CoA hydrolase (3.7.1.16)	401/01011	. . Aspartate 1-decarboxylase (4.1.1.11)
307/01017	. . 4,5:9,10-Diseco-3-hydroxy-5,9,17-trioxoandrost-1(10),2-diene-4-oate hydrolase (3.7.1.17)	401/01012	. . Aspartate 4-decarboxylase (4.1.1.12)
307/01018	. . 6-Oxocamphor hydrolase (3.7.1.18)	401/01014	. . Valine decarboxylase (4.1.1.14)
307/01019	. . 2,6-Dihydroxypseudoxynicotine hydrolase (3.7.1.19)	401/01015	. . Glutamate decarboxylase (4.1.1.15)
307/0102	. . 3-Fumarylpyruvate hydrolase (3.7.1.20)	401/01016	. . Hydroxyglutamate decarboxylase (4.1.1.16)
<b>308/00</b>	<b>Hydrolases acting on halide bonds (3.8)</b>	401/01017	. . Ornithine decarboxylase (4.1.1.17)
308/01	. in C-halide substances (3.8.1)	401/01018	. . Lysine decarboxylase (4.1.1.18)
308/01001	. . Alkylhalidase (3.8.1.1)	401/01019	. . Arginine decarboxylase (4.1.1.19)
308/01002	. . (S)-2-Haloacid dehalogenase (3.8.1.2)	401/0102	. . Diaminopimelate decarboxylase (4.1.1.20)
308/01003	. . Haloacetate dehalogenase (3.8.1.3)	401/01021	. . Phosphoribosylaminoimidazole carboxylase (4.1.1.21)
308/01005	. . Haloalkane dehalogenase (3.8.1.5)	401/01022	. . Histidine decarboxylase (4.1.1.22)
308/01006	. . 4-Chlorobenzoate dehalogenase (3.8.1.6)	401/01023	. . Orotidine-5'-phosphate decarboxylase (4.1.1.23)
308/01007	. . 4-Chlorobenzoyl-CoA dehalogenase (3.8.1.7)	401/01024	. . Aminobenzoate decarboxylase (4.1.1.24)
308/01008	. . Atrazine chlorohydrolase (3.8.1.8)	401/01025	. . Tyrosine decarboxylase (4.1.1.25)
308/01009	. . (R)-2-Haloacid dehalogenase (3.8.1.9)	401/01028	. . Aromatic-L-amino-acid decarboxylase (4.1.1.28), i.e. tryptophane-decarboxylase
308/0101	. . 2-Haloacid dehalogenase (configuration-inverting) (3.8.1.10)	401/01029	. . Sulfinolalanine decarboxylase (4.1.1.29)
308/01011	. . 2-Haloacid dehalogenase (configuration-retaining) (3.8.1.11)	401/0103	. . Pantothenoylcysteine decarboxylase (4.1.1.30)
<b>309/00</b>	<b>Hydrolases acting on phosphorus-nitrogen bonds (3.9)</b>	401/01031	. . Phosphoenolpyruvate carboxylase (4.1.1.31)
309/01	. acting on phosphorus-nitrogen bonds (3.9.1)	401/01032	. . Phosphoenolpyruvate carboxykinase (GTP) (4.1.1.32)
309/01001	. . Phosphoamidase (3.9.1.1)	401/01033	. . Diphosphomevalonate decarboxylase (4.1.1.33), i.e. mevalonate-pyrophosphate decarboxylase
<b>310/00</b>	<b>Hydrolases acting on sulfur-nitrogen bonds (3.10)</b>	401/01034	. . Dehydro-L-gulonate decarboxylase (4.1.1.34)
310/01	. acting on sulfur-nitrogen bonds (3.10.1)	401/01035	. . UDP-glucuronate decarboxylase (4.1.1.35), i.e. UDP-D-xylose synthase
310/01001	. . N-Sulfoglucosamine sulfohydrolase (3.10.1.1)	401/01036	. . Phosphopantothenoylcysteine decarboxylase (4.1.1.36)
310/01002	. . Cyclamate sulfohydrolase (3.10.1.2)	401/01037	. . Uroporphyrinogen decarboxylase (4.1.1.37)
<b>311/00</b>	<b>Hydrolases acting on carbon-phosphorus bonds (3.11)</b>	401/01038	. . Phosphoenolpyruvate carboxykinase (diphosphate) (4.1.1.38)
311/01	. acting on carbon-phosphorus bonds (3.11.1)	401/01039	. . Ribulose-bisphosphate carboxylase (4.1.1.39)
311/01001	. . Phosphonoacetaldehyde hydrolase (3.11.1.1)	401/0104	. . Hydroxypyruvate decarboxylase (4.1.1.40)
311/01002	. . Phosphonoacetate hydrolase (3.11.1.2)	401/01041	. . Methylmalonyl-CoA decarboxylase (4.1.1.41)
311/01003	. . Phosphonopyruvate hydrolase (3.11.1.3)	401/01042	. . Carnitine decarboxylase (4.1.1.42)
<b>312/00</b>	<b>Hydrolases acting on sulfur-sulfur bonds (3.12)</b>	401/01043	. . Phenylpyruvate decarboxylase (4.1.1.43)
312/01	. acting on sulfur-sulfur bonds (3.12.1)	401/01044	. . 4-Carboxymuconolactone decarboxylase (4.1.1.44)
312/01001	. . Trithionate hydrolase (3.12.1.1)	401/01045	. . Aminocarboxymuconate-semialdehyde decarboxylase (4.1.1.45)
<b>313/00</b>	<b>Hydrolases acting on carbon-sulfur bonds (3.13)</b>	401/01046	. . o-Pyrocatechuate decarboxylase (4.1.1.46)
313/01	. acting on carbon-sulfur bonds (3.13.1)	401/01047	. . Tartronate-semialdehyde synthase (4.1.1.47)
313/01001	. . UDP-sulfoquinovose synthase (3.13.1.1)	401/01048	. . Indole-3-glycerol-phosphate synthase (4.1.1.48)
313/01003	. . 2'-Hydroxybiphenyl-2-sulfinate desulfinate (3.13.1.3)	401/01049	. . Phosphoenolpyruvate carboxykinase (ATP) (4.1.1.49)
<b>401/00</b>	<b>Carbon-carbon lyases (4.1)</b>	401/0105	. . Adenosylmethionine decarboxylase (4.1.1.50)
		401/01051	. . 3-Hydroxy-2-methylpyridine-4,5-dicarboxylate 4-decarboxylase (4.1.1.51)
		401/01052	. . 6-Methylsalicylate decarboxylase (4.1.1.52)
		401/01053	. . Phenylalanine decarboxylase (4.1.1.53)
		401/01054	. . Dihydroxyfumarate decarboxylase (4.1.1.54)



401/01055	. . 4,5-Dihydroxyphthalate decarboxylase (4.1.1.55)	401/02014	. . 2-Dehydro-3-deoxy-phosphogluconate aldolase (4.1.2.14)
401/01056	. . 3-Oxolaurate decarboxylase (4.1.1.56)	401/02017	. . L-Fucose-phosphate aldolase (4.1.2.17)
401/01057	. . Methionine decarboxylase (4.1.1.57)	401/02018	. . 2-Dehydro-3-deoxy-L-pentionate aldolase (4.1.2.18)
401/01058	. . Orsellinate decarboxylase (4.1.1.58)	401/02019	. . Rhamnulose-1-phosphate aldolase (4.1.2.19)
401/01059	. . Gallate decarboxylase (4.1.1.59)	401/0202	. . 2-Dehydro-3-deoxyglucarate aldolase (4.1.2.20)
401/0106	. . Stipitatonate decarboxylase (4.1.1.60)	401/02021	. . 2-Dehydro-3-deoxy-6-phosphogalactonate aldolase (4.1.2.21)
401/01061	. . 4-Hydroxybenzoate decarboxylase (4.1.1.61)	401/02022	. . Fructose-6-phosphate phosphoketolase (4.1.2.22)
401/01062	. . Gentisate decarboxylase (4.1.1.62)	401/02023	. . 3-Deoxy-D-manno-octulosonate aldolase (4.1.2.23)
401/01063	. . Protocatechuate decarboxylase (4.1.1.63)	401/02024	. . Dimethylaniline-N-oxide aldolase (4.1.2.24)
401/01064	. . 2,2-Dialkylglycine decarboxylase (pyruvate) (4.1.1.64)	401/02025	. . Dihydroneopterin aldolase (4.1.2.25)
401/01065	. . Phosphatidylserine decarboxylase (4.1.1.65)	401/02026	. . Phenylserine aldolase (4.1.2.26)
401/01066	. . Uracil-5-carboxylate decarboxylase (4.1.1.66)	401/02027	. . Sphinganine-1-phosphate aldolase (4.1.2.27)
401/01067	. . UDP-galacturonate decarboxylase (4.1.1.67)	401/02028	. . 2-Dehydro-3-deoxy-D-pentionate aldolase (4.1.2.28)
401/01068	. . 5-Oxopent-3-ene-1,2,5-tricarboxylate decarboxylase (4.1.1.68)	401/02029	. . 5-Dehydro-2-deoxyphosphogluconate aldolase (4.1.2.29)
401/01069	. . 3,4-Dihydroxyphthalate decarboxylase (4.1.1.69)	401/0203	. . 17-Alpha-hydroxyprogesterone aldolase (4.1.2.30)
401/0107	. . Glutaconyl-CoA decarboxylase (4.1.1.70)	401/02032	. . Trimethylamine-oxide aldolase (4.1.2.32)
401/01071	. . 2-Oxoglutarate decarboxylase (4.1.1.71)	401/02033	. . Fucosterol-epoxide lyase (4.1.2.33)
401/01072	. . Branched-chain-2-oxoacid decarboxylase (4.1.1.72)	401/02034	. . 4-(2-carboxyphenyl)-2-oxobut-3-enoate aldolase (4.1.2.34)
401/01073	. . Tartrate decarboxylase (4.1.1.73)	401/02035	. . Propionin synthase (4.1.2.35)
401/01074	. . Indolepyruvate decarboxylase (4.1.1.74)	401/02036	. . Lactate aldolase (4.1.2.36)
401/01075	. . 5-Guanidino-2-oxopentanoate decarboxylase (4.1.1.75)	401/02037	. . Hydroxynitrilase (4.1.2.37) ( <a href="#">C12Y 401/02046</a> , <a href="#">C12Y 401/02047</a> take precedence)
401/01076	. . Arylmalonate decarboxylase (4.1.1.76)	401/02038	. . Benzoin aldolase (4.1.2.38)
401/01077	. . 2-Oxo-3-hexenedioate decarboxylase (4.1.1.77)	401/0204	. . Tagatose-bisphosphate aldolase (4.1.2.40)
401/01078	. . Acetylenedicarboxylate decarboxylase (4.1.1.78)	401/02041	. . Vanillin synthase (4.1.2.41)
401/01079	. . Sulfopyruvate decarboxylase (4.1.1.79)	401/02042	. . D-Threonine aldolase (4.1.2.42)
401/0108	. . 4-Hydroxyphenylpyruvate decarboxylase (4.1.1.80)	401/02043	. . 3-Hexulose-6-phosphate synthase (4.1.2.43)
401/01081	. . Threonine-phosphate decarboxylase (4.1.1.81)	401/02044	. . Benzoyl-CoA-dihydrodiol lyase (4.1.2.44)
401/01082	. . Phosphonopyruvate decarboxylase (4.1.1.82)	401/02045	. . Trans-o-hydroxybenzylidenepyruvate hydratase-aldolase (4.1.2.45)
401/01083	. . 4-Hydroxyphenylacetate decarboxylase (4.1.1.83)	401/02046	. . Aliphatic (R)-hydroxynitrile lyase (4.1.2.46)
401/01084	. . D-Dopachrome decarboxylase (4.1.1.84)	401/02047	. . (S)-Hydroxynitrile lyase (4.1.2.47)
401/01085	. . 3-Dehydro-L-gulonate-6-phosphate decarboxylase (4.1.1.85)	401/02048	. . Low-specificity L-threonine aldolase (4.1.2.48)
401/01086	. . Diaminobutyrate decarboxylase (4.1.1.86)	401/02049	. . L-Allo-threonine aldolase (4.1.2.49)
401/01087	. . Malonyl-S-ACP decarboxylase (4.1.1.87)	401/0205	. . 6-Carboxytetrahydropterin synthase (4.1.2.50)
401/01088	. . Biotin-independent malonate decarboxylase (4.1.1.88)	401/03	. . Oxo-acid-lyases (4.1.3)
401/01089	. . Biotin-dependent malonate decarboxylase (4.1.1.89)	401/03001	. . Isocitrate lyase (4.1.3.1)
401/0109	. . Peptidyl-glutamate 4-carboxylase (4.1.1.90)	401/03003	. . N-Acetylneuraminate lyase (4.1.3.3)
401/01091	. . Salicylate decarboxylase (4.1.1.91)	401/03004	. . Hydroxymethylglutaryl-CoA lyase (4.1.3.4)
401/01092	. . Indole-3-carboxylate decarboxylase (4.1.1.92)	401/03006	. . Citrate (pro-3S)-lyase (4.1.3.6)
401/01093	. . Pyrrole-2-carboxylate decarboxylase (4.1.1.93)	401/03013	. . Oxalomalate lyase (4.1.3.13)
401/01094	. . Ethylmalonyl-CoA decarboxylase (4.1.1.94)	401/03014	. . L-Erythro-3-hydroxyaspartate aldolase (4.1.3.14)
401/01095	. . L-Glutamyl-[BtrI acyl-carrier protein] decarboxylase (4.1.1.95)	401/03016	. . 4-Hydroxy-2-oxoglutarate aldolase (4.1.3.16)
401/01096	. . Carboxynorspermidine decarboxylase (4.1.1.96)	401/03017	. . 4-Hydroxy-4-methyl-2-oxoglutarate aldolase (4.1.3.17)
401/02	. . Aldehyde-lyases (4.1.2)	401/03022	. . Citramalate lyase (4.1.3.22)
401/02002	. . Ketotetrose-phosphate aldolase (4.1.2.2)	401/03024	. . Malyl-CoA lyase (4.1.3.24)
401/02004	. . Deoxyribose-phosphate aldolase (4.1.2.4)	401/03025	. . Citramalyl-CoA lyase (4.1.3.25)
401/02005	. . L-Threonine aldolase (4.1.2.5)	401/03026	. . 3-Hydroxy-3-isohexenylglutaryl-CoA lyase (4.1.3.26)
401/02008	. . Indole-3-glycerol-phosphate lyase (4.1.2.8)	401/03027	. . Anthranilate synthase (4.1.3.27)
401/02009	. . Phosphoketolase (4.1.2.9)	401/0303	. . Methylisocitrate lyase (4.1.3.30)
401/0201	. . (R)-Mandelonitrile lyase (4.1.2.10)	401/03032	. . 2,3-Dimethylmalate lyase (4.1.3.32)
401/02011	. . Hydroxymandelonitrile lyase (4.1.2.11)	401/03034	. . Citryl-CoA lyase (4.1.3.34)
401/02012	. . 2-Dehydropanoate aldolase (4.1.2.12), i.e. ketopantoaldolase		
401/02013	. . Fructose-bisphosphate aldolase (4.1.2.13)		

401/03035	. . (1-hydroxycyclohexan-1-yl)acetyl-CoA lyase (4.1.3.35)	402/01042	. . Galactarate dehydratase (4.2.1.42)
401/03036	. . 1,4-Dihydroxy-2-naphthoyl-CoA synthase (4.1.3.36)	402/01043	. . 2-Dehydro-3-deoxy-L-arabinonate dehydratase (4.2.1.43)
401/03038	. . Aminodeoxychorismate lyase (4.1.3.38)	402/01044	. . Myo-inosose-2 dehydratase (4.2.1.44)
401/03039	. . 4-Hydroxy-2-oxovalerate aldolase (4.1.3.39)	402/01045	. . CDP-glucose 4,6-dehydratase (4.2.1.45)
401/0304	. . Chorismate lyase (4.1.3.40)	402/01046	. . dTDP-glucose 4,6-dehydratase (4.2.1.46)
401/03041	. . 3-Hydroxy-D-aspartate aldolase (4.1.3.41)	402/01047	. . GDP-mannose 4,6-dehydratase (4.2.1.47), i.e. GMD
401/99	. Other Carbon-Carbon Lyases (1.4.99)	402/01048	. . D-Glutamate cyclase (4.2.1.48)
401/99001	. . Tryptophanase (4.1.99.1)	402/01049	. . Urocanate hydratase (4.2.1.49)
401/99002	. . Tyrosine phenol-lyase (4.1.99.2)	402/0105	. . Pyrazolylalanine synthase (4.2.1.50)
401/99003	. . Deoxyribodipyrimidine photo-lyase (4.1.99.3)	402/01051	. . Prephenate dehydratase (4.2.1.51)
401/99005	. . Octadecanal decarbonylase (4.1.99.5)	402/01053	. . Oleate hydratase (4.2.1.53)
401/99011	. . Benzylsuccinate synthase (4.1.99.11)	402/01054	. . Lactoyl-CoA dehydratase (4.2.1.54)
401/99012	. . 3,4-Dihydroxy-2-butanone-4-phosphate synthase (4.1.99.12)	402/01055	. . 3-Hydroxybutyryl-CoA dehydratase (4.2.1.55)
401/99013	. . (6-4)DNA photolyase (4.1.99.13)	402/01056	. . Itaconyl-CoA hydratase (4.2.1.56)
401/99014	. . Spore photoproduct lyase (4.1.99.14)	402/01057	. . Isohexenylglutaconyl-CoA hydratase (4.2.1.57)
401/99016	. . Geosmin synthase (4.1.99.16)	402/01059	. . 3-Hydroxyacyl-[acyl-carrier-protein] dehydratase (4.2.1.59)
401/99017	. . Phosphomethylpyrimidine synthase (4.1.99.17)	402/01062	. . 5-Alpha-hydroxysteroid dehydratase (4.2.1.62)
401/99018	. . Cyclic pyranopterin monophosphate synthase (4.1.99.18)	402/01065	. . 3-Cyanoalanine hydratase (4.2.1.65)
401/99019	. . 2-Iminoacetate synthase (4.1.99.19)	402/01066	. . Cyanide hydratase (4.2.1.66)
<b>402/00</b>	<b>Carbon-oxygen lyases (4.2)</b>	402/01067	. . D-Fuconate dehydratase (4.2.1.67)
402/01	. Hydro-lyases (4.2.1)	402/01068	. . L-Fuconate dehydratase (4.2.1.68)
402/01001	. . Carbonate dehydratase (4.2.1.1), i.e. carbonic anhydrase	402/01069	. . Cyanamide hydratase (4.2.1.69)
402/01002	. . Fumarate hydratase (4.2.1.2)	402/0107	. . Pseudouridylyl synthase (4.2.1.70)
402/01003	. . Aconitate hydratase (4.2.1.3)	402/01073	. . Protoaphin-aglucone dehydratase (cyclizing) (4.2.1.73)
402/01004	. . Citrate dehydratase (4.2.1.4)	402/01074	. . Long-chain-enoil-CoA hydratase (4.2.1.74)
402/01005	. . Arabinonate dehydratase (4.2.1.5)	402/01075	. . Uroporphyrinogen-III synthase (4.2.1.75)
402/01006	. . Galactonate dehydratase (4.2.1.6)	402/01076	. . UDP-glucose 4,6-dehydratase (4.2.1.76)
402/01007	. . Altronate dehydratase (4.2.1.7)	402/01077	. . Trans-L-3-hydroxyproline dehydratase (4.2.1.77)
402/01008	. . Mannonate dehydratase (4.2.1.8)	402/01078	. . (S)-norcoclaurine synthase (4.2.1.78)
402/01009	. . Dihydroxy-acid dehydratase (4.2.1.9), i.e. acetohydroxyacid dehydratase	402/01079	. . 2-Methylcitrate dehydratase (4.2.1.79)
402/0101	. . 3-Dehydroquinate dehydratase (4.2.1.10)	402/0108	. . 2-Oxopent-4-enoate hydratase (4.2.1.80)
402/01011	. . Phosphopyruvate hydratase (4.2.1.11), i.e. enolase	402/01081	. . D(-)-tartrate dehydratase (4.2.1.81)
402/01012	. . Phosphogluconate dehydratase (4.2.1.12)	402/01082	. . Xylonate dehydratase (4.2.1.82)
402/01017	. . Enoyl-CoA hydratase (4.2.1.17), i.e. crotonase	402/01083	. . 4-Oxalmesaconate hydratase (4.2.1.83)
402/01018	. . Methylglutaconyl-CoA hydratase (4.2.1.18)	402/01084	. . Nitrile hydratase (4.2.1.84)
402/01019	. . Imidazoleglycerol-phosphate dehydratase (4.2.1.19)	402/01085	. . Dimethylmaleate hydratase (4.2.1.85)
402/0102	. . Tryptophan synthase (4.2.1.20)	402/01087	. . Octopamine dehydratase (4.2.1.87)
402/01022	. . Cystathionine beta-synthase (4.2.1.22)	402/01088	. . Synephrine dehydratase (4.2.1.88)
402/01024	. . Porphobilinogen synthase (4.2.1.24)	402/01089	. . Carnitine dehydratase (4.2.1.89)
402/01025	. . L-Arabinonate dehydratase (4.2.1.25)	402/0109	. . L-Rhamnonate dehydratase (4.2.1.90)
402/01027	. . Acetylenecarboxylate hydratase (4.2.1.27)	402/01091	. . Arogenate dehydratase (4.2.1.91)
402/01028	. . Propanediol dehydratase (4.2.1.28)	402/01092	. . Hydroperoxide dehydratase (4.2.1.92)
402/0103	. . Glycerol dehydratase (4.2.1.30)	402/01093	. . ATP-dependent NAD(P)H-hydrate dehydratase (4.2.1.93)
402/01031	. . Maleate hydratase (4.2.1.31)	402/01094	. . Scytalone dehydratase (4.2.1.94)
402/01032	. . L(+)-Tartrate dehydratase (4.2.1.32)	402/01095	. . Kievitone hydratase (4.2.1.95)
402/01033	. . 3-Isopropylmalate dehydratase (4.2.1.33)	402/01096	. . 4a-Hydroxytetrahydrobiopterin dehydratase (4.2.1.96)
402/01034	. . (S)-2-Methylmalate dehydratase (4.2.1.34)	402/01097	. . Phaseollidin hydratase (4.2.1.97)
402/01035	. . (R)-2-Methylmalate dehydratase (4.2.1.35)	402/01098	. . 16-Alpha-hydroxyprogesterone dehydratase (4.2.1.98)
402/01036	. . Homoaconitate hydratase (4.2.1.36)	402/01099	. . 2-Methylisocitrate dehydratase (4.2.1.99)
402/01039	. . Gluconate dehydratase (4.2.1.39)	402/011	. . Cyclohexa-1,5-dienecarbonyl-CoA hydratase (4.2.1.100)
402/0104	. . Glucarate dehydratase (4.2.1.40)	402/01101	. . Trans-feruloyl-CoA hydratase (4.2.1.101)
402/01041	. . 5-Dehydro-4-deoxyglucarate dehydratase (4.2.1.41)	402/01103	. . Cyclohexyl-isocyanide hydratase (4.2.1.103)
		402/01104	. . Cyanase (4.2.1.104)
		402/01105	. . 2-Hydroxyisoflavanone dehydratase (4.2.1.105)

402/01106	. . Bile-acid 7- $\alpha$ -dehydratase (4.2.1.106)	402/02016	. . Levan fructotransferase (DFA-IV-forming) (4.2.2.16)
402/01107	. . 3- $\alpha$ ,7- $\alpha$ ,12- $\alpha$ -trihydroxy-5- $\beta$ -cholest-24-enoyl-CoA hydratase (4.2.1.107)	402/02017	. . Inulin fructotransferase (DFA-I-forming) (4.2.2.17)
402/01108	. . Ectoine synthase (4.2.1.108)	402/02018	. . Inulin fructotransferase (DFA-III-forming) (4.2.2.18)
402/01109	. . Methylthioribulose 1-phosphate dehydratase (4.2.1.109)	402/02019	. . Chondroitin B lyase (4.2.2.19)
402/01111	. . Aldos-2-ulose dehydratase (4.2.1.110)	402/0202	. . Chondroitin-sulfate-ABC endolyase (4.2.2.20)
402/01111	. . 1,5-Anhydro-D-fructose dehydratase (4.2.1.111)	402/02021	. . Chondroitin-sulfate-ABC exolyase (4.2.2.21)
402/01112	. . Acetylene hydratase (4.2.1.112)	402/02022	. . Pectate trisaccharide-lyase (4.2.2.22)
402/01113	. . o-Succinylbenzoate synthase (4.2.1.113)	402/02023	. . Rhamnogalacturonan endolyase (4.2.2.23)
402/01114	. . Methanogen homoacnitase (4.2.1.114)	402/02024	. . Rhamnogalacturonan exolyase (4.2.2.24)
402/01115	. . UDP-N-acetylglucosamine 4,6-dehydratase (inverting) (4.2.1.115)	402/02025	. . Gellan lyase (4.2.2.25)
402/01116	. . 3-Hydroxypropionyl-CoA dehydratase (4.2.1.116)	402/03	. acting on phosphates (4.2.3)
402/01117	. . 2-Methylcitrate dehydratase (2-methyl-trans-aconitate forming)(4.2.1.117)	402/03001	. . Threonine synthase (4.2.3.1)
402/01118	. . 3-Dehydroshikimate dehydratase (4.2.1.118)	402/03002	. . Ethanolamine-phosphate phospho-lyase (4.2.3.2)
402/01119	. . Enoyl-CoA hydratase 2 (4.2.1.119)	402/03003	. . Methylglyoxal synthase (4.2.3.3)
402/0112	. . 4-Hydroxybutanoyl-CoA dehydratase (4.2.1.120)	402/03004	. . 3-Dehydroquininate synthase (4.2.3.4)
402/01121	. . Colneleate synthase (4.2.1.121)	402/03005	. . Chorismate synthase (4.2.3.5)
402/01122	. . Tryptophan synthase (indole-salvaging) (4.2.1.122)	402/03006	. . Trichodiene synthase (4.2.3.6)
402/01123	. . Tetrahymanol synthase (4.2.1.123)	402/03007	. . Pentalenene synthase (4.2.3.7)
402/01124	. . Arabidiol synthase (4.2.1.124)	402/03008	. . Casbene synthase (4.2.3.8)
402/01125	. . Dammarenediol II synthase (4.2.1.125)	402/03009	. . Aristolochene synthase (4.2.3.9)
402/01126	. . N-Acetylmuramic acid 6-phosphate etherase (4.2.1.126)	402/0301	. . (-)-Endo-fenchol synthase (4.2.3.10)
402/01127	. . Linalool dehydratase (4.2.1.127)	402/03011	. . Sabinene-hydrate synthase (4.2.3.11)
402/01128	. . Lupan-3- $\beta$ ,20-diol synthase (4.2.1.128)	402/03012	. . 6-Pyruvoyltetrahydropterin synthase (4.2.3.12)
402/01129	. . Squalene--hopanol cyclase (4.2.1.129)	402/03013	. . (+)-Delta-cadinene synthase (4.2.3.13)
402/0113	. . D-Lactate dehydratase (4.2.1.130)	402/03014	. . Pinene synthase (4.2.3.14) ( <a href="#">C12Y 402/03119</a> and <a href="#">C12Y 402/0312</a> take precedence)
402/01131	. . Carotenoid 1,2-hydratase (4.2.1.131)	402/03015	. . Myrcene synthase (4.2.3.15)
402/01132	. . 2-Hydroxyhexa-2,4-dienoate hydratase (4.2.1.132)	402/03016	. . (4S)-Limonene synthase (4.2.3.16)
402/01133	. . Copal-8-ol diphosphate hydratase (4.2.1.133)	402/03017	. . Taxadiene synthase (4.2.3.17)
402/01134	. . Very-long-chain (3R)-3-hydroxyacyl-[acyl-carrier protein] dehydratase (4.2.1.134)	402/03018	. . Abieta-7,13-diene synthase (4.2.3.18)
402/01135	. . UDP-N-acetylglucosamine 4,6-dehydratase (configuration-retaining) (4.2.1.135)	402/03019	. . Ent-kaurene synthase (4.2.3.19)
402/01136	. . ADP-dependent NAD(P)H-hydrate dehydratase (4.2.1.136)	402/0302	. . (R)-Limonene synthase (4.2.3.20)
402/01137	. . Sporulenol synthase (4.2.1.137)	402/03021	. . Vetispiradiene synthase (4.2.3.21)
402/02	. acting on polysaccharides (4.2.2)	402/03022	. . Germacradienol synthase (4.2.3.22)
402/02001	. . Hyaluronate lyase (4.2.2.1)	402/03023	. . Germacrene-A synthase (4.2.3.23)
402/02002	. . Pectate lyase (4.2.2.2)	402/03024	. . Amorph-4,11-diene synthase (4.2.3.24)
402/02003	. . Poly( $\beta$ -D-mannuronate) lyase (4.2.2.3)	402/03025	. . S-Linalool synthase (4.2.3.25)
402/02004	. . Chondroitin ABC lyase (4.2.2.4), i.e. chondroitinase ( <a href="#">C12Y 402/0202</a> , <a href="#">C12Y 402/02021</a> take precedence)	402/03026	. . R-Linalool synthase (4.2.3.26)
402/02005	. . Chondroitin AC lyase (4.2.2.5)	402/03027	. . Isoprene synthase (4.2.3.27)
402/02006	. . Oligogalacturonide lyase (4.2.2.6)	402/03028	. . Ent-cassa-12,15-diene synthase (4.2.3.28)
402/02007	. . Heparin lyase (4.2.2.7), i.e. heparinase I	402/03029	. . Ent-sandaracopimaradiene synthase (4.2.3.29)
402/02008	. . Heparin-sulfate lyase (4.2.2.8)	402/0303	. . Ent-pimara-8(14),15-diene synthase (4.2.3.30)
402/02009	. . Pectate disaccharide-lyase (4.2.2.9)	402/03031	. . Ent-pimara-9(11),15-diene synthase (4.2.3.31)
402/0201	. . Pectin lyase (4.2.2.10)	402/03032	. . Levopimaradiene synthase (4.2.3.32)
402/02011	. . Poly( $\alpha$ -L-guluronate) lyase (4.2.2.11), i.e. alginase II	402/03033	. . Stemar-13-ene synthase (4.2.3.33)
402/02012	. . Xanthan lyase (4.2.2.12)	402/03034	. . Stemod-13(17)-ene synthase (4.2.3.34)
402/02013	. . Exo-(1 $\rightarrow$ 4)- $\alpha$ -D-glucan lyase (4.2.2.13)	402/03035	. . Syn-pimara-7,15-diene synthase (4.2.3.35)
402/02014	. . Glucuronan lyase (4.2.2.14)	402/03036	. . Terpentetriene synthase (4.2.3.36)
402/02015	. . Anhydrosialidase (4.2.2.15)	402/03037	. . Epi-isozizaene synthase (4.2.3.37)
		402/03038	. . $\alpha$ -bisabolene synthase (4.2.3.38)
		402/03039	. . Epi-cedrol synthase (4.2.3.39)
		402/0304	. . (Z)- $\gamma$ -bisabolene synthase (4.2.3.40)
		402/03041	. . Elisabethatriene synthase (4.2.3.41)
		402/03042	. . Aphidicolan-16- $\beta$ -ol synthase (4.2.3.42)
		402/03043	. . Fusicocca-2,10(14)-diene synthase (4.2.3.43)
		402/03044	. . Isopimara-7,15-diene synthase (4.2.3.44)
		402/03045	. . Phyllocladan-16- $\alpha$ -ol synthase (4.2.3.45)
		402/03046	. . $\alpha$ -farnesene synthase (4.2.3.46)
		402/03047	. . $\beta$ -farnesene synthase (4.2.3.47)

- 402/03048 . . (3S,6E)-Nerolidol synthase (4.2.3.48)  
 402/03049 . . (3R,6E)-Nerolidol synthase (4.2.3.49)  
 402/0305 . . (+)-Alpha-santalene synthase ((2Z,6Z)-farnesyl diphosphate cyclizing)(4.2.3.50)  
 402/03051 . . Beta-phellandrene synthase (neryl-diphosphate-cyclizing) (4.2.3.51)  
 402/03052 . . (4S)-Beta-phellandrene synthase (geranyl-diphosphate-cyclizing) (4.2.3.52)  
 402/03053 . . (+)-Endo-beta-bergamotene synthase ((2Z,6Z)-farnesyl diphosphate cyclizing)(4.2.3.53)  
 402/03054 . . (-)-Endo-alpha-bergamotene synthase ((2Z,6Z)-farnesyl diphosphate cyclizing)(4.2.3.54)  
 402/03055 . . (S)-Beta-bisabolene synthase (4.2.3.55)  
 402/03056 . . Gamma-humulene synthase (4.2.3.56)  
 402/03057 . . Beta-caryophyllene synthase (4.2.3.57)  
 402/03058 . . Longifolene synthase (4.2.3.58)  
 402/03059 . . (E)-Gamma-bisabolene synthase (4.2.3.59)  
 402/0306 . . Germacrene C synthase (4.2.3.60)  
 402/03061 . . 5-Epiaristolochene synthase (4.2.3.61)  
 402/03062 . . (-)-Gamma-cadinene synthase ((2Z,6E)-farnesyl diphosphate cyclizing)(4.2.3.62)  
 402/03063 . . (+)-Cubenene synthase (4.2.3.63)  
 402/03064 . . (+)-Epicubenol synthase (4.2.3.64)  
 402/03065 . . Zingiberene synthase (4.2.3.65)  
 402/03066 . . Beta-selinene cyclase (4.2.3.66)  
 402/03067 . . Cis-muroladiene synthase (4.2.3.67)  
 402/03068 . . Beta-eudesmol synthase (4.2.3.68)  
 402/03069 . . (+)-Alpha-barbatene synthase (4.2.3.69)  
 402/0307 . . Patchoulol synthase (4.2.3.70)  
 402/03071 . . (E,E)-Germacrene B synthase (4.2.3.71)  
 402/03072 . . Alpha-gurjunene synthase (4.2.3.72)  
 402/03073 . . Valencene synthase (4.2.3.73)  
 402/03074 . . Presilphiperfolanol synthase (4.2.3.74)  
 402/03075 . . (-)-Germacrene D synthase (4.2.3.75)  
 402/03076 . . (+)-Delta-selinene synthase (4.2.3.76)  
 402/03077 . . (+)-Germacrene D synthase (4.2.3.77)  
 402/03078 . . Beta-chamigrene synthase (4.2.3.78)  
 402/03079 . . Thujopsene synthase (4.2.3.79)  
 402/0308 . . Alpha-longipinene synthase (4.2.3.80)  
 402/03081 . . Exo-alpha-bergamotene synthase (4.2.3.81)  
 402/03082 . . Alpha-santalene synthase (4.2.3.82)  
 402/03083 . . Beta-santalene synthase (4.2.3.83)  
 402/03084 . . 10-Epi-gamma-eudesmol synthase (4.2.3.84)  
 402/03085 . . Alpha-eudesmol synthase (4.2.3.85)  
 402/03086 . . 7-Epi-alpha-selinene synthase (4.2.3.86)  
 402/03087 . . Alpha-guaiene synthase (4.2.3.87)  
 402/03088 . . Viridiflorene synthase (4.2.3.88)  
 402/03089 . . (+)-Beta-caryophyllene synthase (4.2.3.89)  
 402/0309 . . 5-Epi-alpha-selinene synthase (4.2.3.90)  
 402/03091 . . Cubebol synthase (4.2.3.91)  
 402/03092 . . (+)-Gamma-cadinene synthase (4.2.3.92)  
 402/03093 . . Delta-guaiene synthase (4.2.3.93)  
 402/03094 . . Gamma-curcumen synthase (4.2.3.94)  
 402/03095 . . (-)-Alpha-cuprenene synthase (4.2.3.95)  
 402/03096 . . Avermitilol synthase (4.2.3.96)  
 402/03097 . . (-)-Delta-cadinene synthase (4.2.3.97)  
 402/03098 . . (+)-T-Murolol synthase (4.2.3.98)  
 402/03099 . . Labdatriene synthase (4.2.3.99)  
 402/031 . . Bicyclogermacrene synthase (4.2.3.100)  
 402/03101 . . 7-Epi-sesquithujene synthase (4.2.3.101)  
 402/03102 . . Sesquithujene synthase (4.2.3.102)  
 402/03103 . . Ent-isokaurene synthase (4.2.3.103)  
 402/03104 . . Alpha-humulene synthase (4.2.3.104)  
 402/03105 . . Tricyclene synthase (4.2.3.105)  
 402/03106 . . (E)-Beta-ocimene synthase (4.2.3.106)  
 402/03107 . . (+)-Car-3-ene synthase (4.2.3.107)  
 402/03108 . . 1,8-Cineole synthase (4.2.3.108)  
 402/03109 . . (-)-Sabinene synthase (4.2.3.109)  
 402/0311 . . (+)-Sabinene synthase (4.2.3.110)  
 402/03111 . . (-)-Alpha-terpineol synthase (4.2.3.111)  
 402/03112 . . (+)-Alpha-terpineol synthase (4.2.3.112)  
 402/03113 . . Terpinolene synthase (4.2.3.113)  
 402/03114 . . Gamma-terpinene synthase (4.2.3.114)  
 402/03115 . . Alpha-terpinene synthase (4.2.3.115)  
 402/03116 . . (+)-Camphene synthase (4.2.3.116)  
 402/03117 . . (-)-Camphene synthase (4.2.3.117)  
 402/03118 . . 2-Methylisoborneol synthase (4.2.3.118)  
 402/03119 . . (-)-Alpha-pinene synthase (4.2.3.119)  
 402/0312 . . (-)-Beta-pinene synthase (4.2.3.120)  
 402/03121 . . (+)-Alpha-pinene synthase (4.2.3.121)  
 402/03122 . . Beta-pinene synthase (4.2.3.122)  
 402/03123 . . Beta-sesquiphellandrene synthase (4.2.3.123)  
 402/03124 . . 2-Deoxy-scylo-inosose synthase (4.2.3.124)  
 402/03125 . . Alpha-murolene synthase (4.2.3.125)  
 402/03126 . . Gamma-murolene synthase (4.2.3.126)  
 402/03127 . . Beta-copaene synthase (4.2.3.127)  
 402/03128 . . Beta-cubebene synthase (4.2.3.128)  
 402/03129 . . (+)-Sativene synthase (4.2.3.129)  
 402/0313 . . Tetraprenyl-beta-curcumen synthase (4.2.3.130)  
 402/03131 . . Miltiradiene synthase (4.2.3.131)  
 402/03132 . . Neoabietadiene synthase (4.2.3.132)  
 402/03133 . . Alpha-copaene synthase (4.2.3.133)  
 402/03134 . . 5-Phosphonoxy-L-lysine phospho-lyase (4.2.3.134)  
 402/03135 . . DELTA6-protoilludene synthase (4.2.3.135)  
 402/03136 . . Alpha-isocomene synthase (4.2.3.136)  
 402/03137 . . (E)-2-Epi-beta-caryophyllene synthase (4.2.3.137)  
 402/03138 . . (+)-Epi-alpha-bisabolol synthase (4.2.3.138)  
 402/03139 . . Valerena-4,7(11)-diene synthase (4.2.3.139)  
 402/0314 . . Cis-abienol synthase (4.2.3.140)  
 402/99 . . Other carbon-oxygen lyases (4.2.99)  
 402/99006 . . Chondroitin sulfate lyase (4.2.99.6)  
 (C12Y 402/02005, C12Y 402/0202, C12Y 402/02021 take precedence)  
 402/99012 . . Carboxymethyloxysuccinate lyase (4.2.99.12)  
 402/99018 . . DNA-(apurinic or apyrimidinic site)lyase (4.2.99.18)  
 402/9902 . . 2-Succinyl-6-hydroxy-2,4-cyclohexadiene-1-carboxylate synthase (4.2.99.20)  
 402/99021 . . Isochorismate lyase (4.2.99.21)  
**403/00 Carbon-nitrogen lyases (4.3)**  
 403/01 . . Ammonia-lyases (4.3.1)  
 403/01001 . . Aspartate ammonia-lyase (4.3.1.1), i.e. aspartase  
 403/01002 . . Methylaspartate ammonia-lyase (4.3.1.2)  
 403/01003 . . Histidine ammonia-lyase (4.3.1.3)  
 403/01004 . . Formimidoyltetrahydrofolate cyclodeaminase (4.3.1.4)  
 403/01005 . . Phenylalanine ammonia-lyase (4.3.1.5)  
 (C12Y 403/01023 - C12Y 403/01025 takes precedence)  
 403/01006 . . Beta-alanyl-CoA ammonia-lyase (4.3.1.6)  
 403/01007 . . Ethanolamine ammonia-lyase (4.3.1.7)

- 403/01009 . . Glucosaminat ammonia-lyase (4.3.1.9)  
 403/0101 . . Serine-sulfate ammonia-lyase (4.3.1.10)  
 403/01012 . . Ornithine cyclodeaminase (4.3.1.12)  
 403/01013 . . Carbamoyl-serine ammonia-lyase (4.3.1.13)  
 403/01014 . . 3-Aminobutyl-CoA ammonia-lyase (4.3.1.14)  
 403/01015 . . Diaminopropionate ammonia-lyase (4.3.1.15)  
 403/01016 . . Threo-3-hydroxy-L-aspartate ammonia-lyase (4.3.1.16)  
 403/01017 . . L-Serine ammonia-lyase (4.3.1.17)  
 403/01018 . . D-Serine ammonia-lyase (4.3.1.18)  
 403/01019 . . Threonine ammonia-lyase (4.3.1.19)  
 403/0102 . . Erythro-3-hydroxy-L-aspartate ammonia-lyase (4.3.1.20)  
 403/01022 . . 3,4-Dihydroxyphenylalanine reductive deaminase (4.3.1.22)  
 403/01023 . . Tyrosine ammonia-lyase (4.3.1.23)  
 403/01024 . . Phenylalanine ammonia-lyase (4.3.1.24)  
 403/01025 . . Phenylalanine-tyrosine ammonia-lyase (4.3.1.25)  
 403/01026 . . Chromopyrrolate synthase (4.3.1.26)  
 403/01027 . . Threo-3-hydroxy-D-aspartate ammonia-lyase (4.3.1.27)  
 403/01028 . . L-Lysine cyclodeaminase (4.3.1.28)  
 403/02 . . Amidine-lyases (4.3.2)  
 403/02001 . . Argininosuccinate lyase (4.3.2.1)  
 403/02002 . . Adenylosuccinate lyase (4.3.2.2)  
 403/02003 . . Ureidoglycolate lyase (4.3.2.3)  
 403/02004 . . Purine imidazole-ring cyclase (4.3.2.4)  
 403/02005 . . Peptidylamidoglycolate lyase (4.3.2.5)  
 403/02006 . . Gamma-L-glutamyl-butyrosin B gamma-glutamyl cyclotransferase (4.3.2.6)  
 403/03 . . Amine-lyases (4.3.3)  
 403/03001 . . 3-Ketovalidoxylamine C-N-lyase (4.3.3.1)  
 403/03002 . . Strictosidine synthase (4.3.3.2)  
 403/03003 . . Deacetylisopecoside synthase (4.3.3.3)  
 403/03004 . . Deacetylpecoside synthase (4.3.3.4)  
 403/03005 . . 4'-Demethylrebeccamycin synthase (4.3.3.5)  
 403/03006 . . Pyridoxal 5'-phosphate synthase (glutamine hydrolyzing)(4.3.3.6)  
 403/03007 . . 4-Hydroxy-tetrahydrodipicolinate synthase (4.3.3.7)  
 403/99 . . Other carbon-nitrogen lyases (4.3.99)  
 403/99002 . . Carboxybiotin decarboxylase (4.3.99.2)  
 403/99003 . . 7-Carboxy-7-deazaguanine synthase (4.3.99.3)
- 404/00 Carbon-sulfur lyases (4.4)**  
 404/01 . . Carbon-sulfur lyases (4.4.1)  
 404/01001 . . Cystathionine gamma-lyase (4.4.1.1)  
 404/01002 . . Homocysteine desulfhydrase (4.4.1.2)  
 404/01003 . . Dimethylpropiothetin dethiomethylase (4.4.1.3)  
 404/01004 . . Alliin lyase (4.4.1.4)  
 404/01005 . . Lactoylglutathione lyase (4.4.1.5)  
 404/01006 . . S-Alkylcysteine lyase (4.4.1.6)  
 404/01008 . . Cystathionine beta-lyase (4.4.1.8)  
 404/01009 . . L-3-Cyanoalanine synthase (4.4.1.9)  
 404/0101 . . Cysteine lyase (4.4.1.10)  
 404/01011 . . Methionine gamma-lyase (4.4.1.11)  
 404/01013 . . Cysteine-S-conjugate beta-lyase (4.4.1.13)  
 404/01014 . . 1-Aminocyclopropane-1-carboxylate synthase (4.4.1.14)  
 404/01015 . . D-Cysteine desulfhydrase (4.4.1.15)  
 404/01016 . . Selenocysteine lyase (4.4.1.16)  
 404/01017 . . Holocytochrome-c synthase (4.4.1.17)  
 404/01019 . . Phosphosulfolactate synthase (4.4.1.19)  
 404/0102 . . Leukotriene-C4 synthase (4.4.1.20)  
 404/01021 . . S-Ribosylhomocysteine lyase (4.4.1.21)  
 404/01022 . . S-(Hydroxymethyl)glutathione synthase (4.4.1.22)  
 404/01023 . . 2-Hydroxypropyl-CoM lyase (4.4.1.23)  
 404/01024 . . (2R)-Sulfolactate sulfo-lyase (4.4.1.24)  
 404/01025 . . L-Cysteate sulfo-lyase (4.4.1.25)  
 404/01026 . . Olivetolic acid cyclase (4.4.1.26)
- 405/00 Carbon-halide lyases (4.5)**  
 405/01 . . Carbon-halide lyases (4.5.1)  
 405/01001 . . DDT-dehydrochlorinase (4.5.1.1)  
 405/01002 . . 3-Chloro-D-alanine dehydrochlorinase (4.5.1.2)  
 405/01003 . . Dichloromethane dehalogenase (4.5.1.3)  
 405/01004 . . L-2-Amino-4-chloropent-4-enoate dehydrochlorinase (4.5.1.4)  
 405/01005 . . S-Carboxymethylcysteine synthase (4.5.1.5)
- 406/00 Phosphorus-oxygen lyases (4.6)**  
 406/01 . . Phosphorus-oxygen lyases (4.6.1)  
 406/01001 . . Aodenylate cyclase (4.6.1.1)  
 406/01002 . . Guanylate cyclase (4.6.1.2)  
 406/01006 . . Cytidylate cyclase (4.6.1.6)  
 406/01012 . . 2-C-Methyl-D-erythritol 2,4-cyclodiphosphate synthase (4.6.1.12)  
 406/01013 . . Phosphatidylinositol diacylglycerol-lyase (4.6.1.13)  
 406/01014 . . Glycosylphosphatidylinositol diacylglycerol-lyase (4.6.1.14)  
 406/01015 . . FAD-AMP lyase (cyclizing) (4.6.1.15)
- 499/00 Other lyases (4.99)**  
 499/01 . . Other lyases (4.99.1)  
 499/01001 . . Ferrochelataase (4.99.1.1)  
 499/01002 . . Alkylmercury lyase (4.99.1.2)  
 499/01003 . . Sirohydrochlorin cobaltochelataase (4.99.1.3)  
 499/01004 . . Sirohydrochlorin ferrochelataase (4.99.1.4)  
 499/01005 . . Aliphatic aldoxime dehydratase (4.99.1.5)  
 499/01006 . . Indoleacetaldoxime dehydratase (4.99.1.6)  
 499/01007 . . Phenylacetaldoxime dehydratase (4.99.1.7)  
 499/01008 . . Heme ligase (4.99.1.8)
- 501/00 Racemases and epimerases (5.1)**  
 501/01 . . acting on amino acids and derivatives (5.1.1)  
 501/01001 . . Alanine racemase (5.1.1.1)  
 501/01002 . . Methionine racemase (5.1.1.2)  
 501/01003 . . Glutamate racemase (5.1.1.3)  
 501/01004 . . Proline racemase (5.1.1.4)  
 501/01005 . . Lysine racemase (5.1.1.5)  
 501/01006 . . Threonine racemase (5.1.1.6)  
 501/01007 . . Diaminopimelate epimerase (5.1.1.7)  
 501/01008 . . 4-Hydroxyproline epimerase (5.1.1.8)  
 501/01009 . . Arginine racemase (5.1.1.9)  
 501/0101 . . Amino-acid racemase (5.1.1.10)  
 501/01011 . . Phenylalanine racemase (ATP-hydrolyzing) (5.1.1.11)  
 501/01012 . . Ornithine racemase (5.1.1.12)  
 501/01013 . . Aspartate racemase (5.1.1.13)  
 501/01014 . . Nocardicin-A epimerase (5.1.1.14)  
 501/01015 . . 2-Aminohexano-6-lactam racemase (5.1.1.15)  
 501/01016 . . Protein-serine epimerase (5.1.1.16)  
 501/01017 . . Isopenicillin-N epimerase (5.1.1.17)  
 501/01018 . . Serine racemase (5.1.1.18)



- 501/02 . . acting on hydroxy acids and derivatives (5.1.2)
- 501/02001 . . Lactate racemase (5.1.2.1)
- 501/02002 . . Mandelate racemase (5.1.2.2)
- 501/02003 . . 3-Hydroxybutyryl-CoA epimerase (5.1.2.3)
- 501/02004 . . Acetoin racemase (5.1.2.4)
- 501/02005 . . Tartrate epimerase (5.1.2.5)
- 501/02006 . . Isocitrate epimerase (5.1.2.6)
- 501/03 . . acting on carbohydrates and derivatives (5.1.3)
- 501/03001 . . Ribulose-phosphate 3-epimerase (5.1.3.1)
- 501/03002 . . UDP-glucose 4-epimerase (5.1.3.2), i.e. UDP-galactose 4-epimerase
- 501/03003 . . Aldose 1-epimerase (5.1.3.3)
- 501/03004 . . L-Ribulose-5-phosphate 4-epimerase (5.1.3.4)
- 501/03005 . . UDP-arabinose 4-epimerase (5.1.3.5)
- 501/03006 . . UDP-glucuronate 4-epimerase (5.1.3.6)
- 501/03007 . . UDP-N-acetylglucosamine 4-epimerase (5.1.3.7)
- 501/03008 . . N-Acylglucosamine 2-epimerase (5.1.3.8)
- 501/03009 . . N-Acylglucosamine-6-phosphate 2-epimerase (5.1.3.9)
- 501/0301 . . CDP-paratose 2-epimerase (5.1.3.10)
- 501/03011 . . Cellobiose epimerase (5.1.3.11)
- 501/03012 . . UDP-glucuronate 5'-epimerase (5.1.3.12)
- 501/03013 . . dTDP-4-dehydrorhamnose 3,5-epimerase (5.1.3.13)
- 501/03014 . . UDP-N-acetylglucosamine 2-epimerase (non-hydrolysing) (5.1.3.14)
- 501/03015 . . Glucose-6-phosphate 1-epimerase (5.1.3.15)
- 501/03016 . . UDP-glucosamine 4-epimerase (5.1.3.16)
- 501/03017 . . Heparosan-N-sulfate-glucuronate 5-epimerase (5.1.3.17)
- 501/03018 . . GDP-mannose 3,5-epimerase (5.1.3.18)
- 501/03019 . . Chondroitin-glucuronate 5-epimerase (5.1.3.19)
- 501/0302 . . ADP-glyceromanno-heptose 6-epimerase (5.1.3.20)
- 501/03021 . . Maltose epimerase (5.1.3.21)
- 501/03022 . . L-Ribulose-5-phosphate 3-epimerase (5.1.3.22)
- 501/03023 . . UDP-2,3-diacetamido-2,3-dideoxyglucuronic acid 2-epimerase (5.1.3.23)
- 501/03024 . . N-Acetylneuraminate epimerase (5.1.3.24)
- 501/03025 . . dTDP-L-rhamnose 4-epimerase (5.1.3.25)
- 501/99 . . acting on other compounds (5.1.99)
- 501/99001 . . Methylmalonyl-CoA epimerase (5.1.99.1)
- 501/99002 . . 16-Hydroxysteroid epimerase (5.1.99.2)
- 501/99003 . . Allantoin racemase (5.1.99.3)
- 501/99004 . . Alpha-methylacyl-CoA racemase (5.1.99.4)
- 501/99005 . . Hydantoin racemase (5.1.99.5)
- 501/99006 . . NAD(P)H-hydrate epimerase (5.1.99.6)
- 502/00 Cis-trans-isomerases (5.2)**
- 502/01 . . Cis-trans-Isomerases (5.2.1)
- 502/01001 . . Maleate isomerase (5.2.1.1)
- 502/01002 . . Maleylacetoacetate isomerase (5.2.1.2)
- 502/01003 . . Retinal isomerase (5.2.1.3) ([C12Y 101/013](#), [C12Y 101/01315](#), [C12Y 203/01135](#), [C12Y 301/01064 take precedence](#))
- 502/01004 . . Maleylpyruvate isomerase (5.2.1.4)
- 502/01005 . . Linoleate isomerase (5.2.1.5)
- 502/01006 . . Furfylfuranide isomerase (5.2.1.6)
- 502/01008 . . Peptidylprolyl isomerase (5.2.1.8), i.e. cyclophilin
- 502/01009 . . Farnesol 2-isomerase (5.2.1.9)
- 502/0101 . . 2-Chloro-4-carboxymethylenebut-2-en-1,4-olide isomerase (5.2.1.10)
- 502/01012 . . Zeta-carotene isomerase (5.2.1.12)
- 502/01013 . . Polycopene isomerase (5.2.1.13)
- 502/01014 . . Beta-carotene isomerase (5.2.1.14)
- 503/00 Intramolecular oxidoreductases (5.3)**
- 503/01 . . interconverting aldoses and ketoses (5.3.1)
- 503/01001 . . Triose-phosphate isomerase (5.3.1.1)
- 503/01003 . . Arabinose isomerase (5.3.1.3)
- 503/01004 . . L-Arabinose isomerase (5.3.1.4)
- 503/01005 . . Xylose isomerase (5.3.1.5)
- 503/01006 . . Ribose-5-phosphate isomerase (5.3.1.6)
- 503/01007 . . Mannose isomerase (5.3.1.7)
- 503/01008 . . Mannose-6-phosphate isomerase (5.3.1.8)
- 503/01009 . . Glucose-6-phosphate isomerase (5.3.1.9)
- 503/01012 . . Glucuronate isomerase (5.3.1.12)
- 503/01013 . . Arabinose-5-phosphate isomerase (5.3.1.13)
- 503/01014 . . L-Rhamnose isomerase (5.3.1.14)
- 503/01015 . . D-Lyxose ketol-isomerase (5.3.1.15)
- 503/01016 . . 1-(5-Phosphoribosyl)-5-((5-phosphoribosylamino)methylideneamino)imidazole-4-carboxamid (5.3.1.16)
- 503/01017 . . 5-Dehydro-4-deoxy-D-glucuronate isomerase (5.3.1.17)
- 503/01018 . . Glucose isomerase (5.3.1.18)
- 503/0102 . . Ribose isomerase (5.3.1.20)
- 503/01021 . . Corticosteroid side-chain-isomerase (5.3.1.21)
- 503/01022 . . Hydroxypyruvate isomerase (5.3.1.22)
- 503/01023 . . S-methyl-5-thioribose-1-phosphate isomerase (5.3.1.23), i.e. 5-methylthioribose-1-phosphate isomerase
- 503/01024 . . Phosphoribosylanthranilate isomerase (5.3.1.24)
- 503/01025 . . L-Fucose isomerase (5.3.1.25)
- 503/01026 . . Galactose-6-phosphate isomerase (5.3.1.26)
- 503/01027 . . 6-Phospho-3-hexuloisomerase (5.3.1.27)
- 503/01028 . . D-Sedoheptulose 7-phosphate isomerase (5.3.1.28)
- 503/02 . . interconverting keto- and enol-groups (5.3.2)
- 503/02001 . . Phenylpyruvate tautomerase (5.3.2.1)
- 503/02002 . . Oxaloacetate tautomerase (5.3.2.2)
- 503/02003 . . TDP-4-oxo-6-deoxy-alpha-D-glucose-3,4-oxoisomerase (dTDP-3-dehydro-6-deoxy-alpha-D-galactopyranose-forming) (5.3.2.3)
- 503/02004 . . TDP-4-oxo-6-deoxy-alpha-D-glucose-3,4-oxoisomerase (dTDP-3-dehydro-6-deoxy-alpha-D-glucopyranose-forming) (5.3.2.4)
- 503/02005 . . 2,3-Diketo-5-methylthiopentyl-1-phosphate enolase (5.3.2.5)
- 503/02006 . . 2-Hydroxymuconate tautomerase (5.3.2.6)
- 503/03 . . transposing C=C bonds (5.3.3)
- 503/03001 . . Steroid DELTA-isomerase (5.3.3.1)
- 503/03002 . . Isopentenyl-diphosphate DELTA-isomerase (5.3.3.2)
- 503/03003 . . Vinylacetyl-CoA DELTA-isomerase (5.3.3.3)
- 503/03004 . . Muconolactone DELTA-isomerase (5.3.3.4)
- 503/03005 . . Cholestenol DELTA-isomerase (5.3.3.5)
- 503/03006 . . Methylitaconate DELTA-isomerase (5.3.3.6)
- 503/03007 . . Aconitate DELTA-isomerase (5.3.3.7)
- 503/03008 . . Dodecenoyl-CoA isomerase (5.3.3.8)
- 503/03009 . . Prostaglandin-A1 DELTA-isomerase (5.3.3.9)
- 503/0301 . . 5-Carboxymethyl-2-hydroxymuconate DELTA-isomerase (5.3.3.10)
- 503/03011 . . Isopiperitenone DELTA-isomerase (5.3.3.11)
- 503/03012 . . L-Dopachrome isomerase (5.3.3.12)
- 503/03013 . . Polyenoic fatty acid isomerase (5.3.3.13)



- 503/03014 . . Trans-2-decenoyl-[acyl-carrier-protein] isomerase (5.3.3.14)
- 503/03015 . . Ascopyrone tautomerase (5.3.3.15)
- 503/03016 . . 4-Oxalomesaconate tautomerase (5.3.3.16)
- 503/03017 . . Trans-2,3-dihydro-3-hydroxyanthranilate isomerase (5.3.3.17)
- 503/03018 . . 2-(1,2-Epoxy-1,2-dihydrophenyl)acetyl-CoA isomerase (5.3.3.18)
- 503/04 . . transposing S-S bonds (5.3.4)
- 503/04001 . . Protein disulfide-isomerase (5.3.4.1), i.e. disulfide bond-forming enzyme
- 503/99 . . Other intramolecular oxidoreductases (5.3.99)
- 503/99002 . . Prostaglandin-D synthase (5.3.99.2)
- 503/99003 . . Prostaglandin-E synthase (5.3.99.3)
- 503/99004 . . Prostaglandin-I synthase (5.3.99.4)
- 503/99005 . . Thromboxane-A synthase (5.3.99.5)
- 503/99006 . . Allene-oxide cyclase (5.3.99.6)
- 503/99007 . . Styrene-oxide isomerase (5.3.99.7)
- 503/99008 . . Capsanthin/capsorubin synthase (5.3.99.8)
- 503/99009 . . Neoxanthin synthase (5.3.99.9)
- 503/9901 . . Thiazole tautomerase (5.3.99.10)
- 504/00 Intramolecular transferases (5.4)**
- 504/01 . . transferring acyl groups (5.4.1)
- 504/01001 . . Lysolecithin acylmutase (5.4.1.1)
- 504/01002 . . Precorrin-8X methylmutase (5.4.1.2)
- 504/02 . . Phosphotransferases (phosphomutases) (5.4.2)
- 504/02001 . . Phosphoglycerate mutase (5.4.2.1)
- 504/02002 . . Phosphoglucomutase (5.4.2.2)
- 504/02003 . . Phosphoacetylglucosamine mutase (5.4.2.3)
- 504/02004 . . Bisphosphoglycerate mutase (5.4.2.4)
- 504/02005 . . Phosphoglucomutase (glucose-cofactor) (5.4.2.5)
- 504/02006 . . Beta-phosphoglucomutase (5.4.2.6)
- 504/02007 . . Phosphopentomutase (5.4.2.7)
- 504/02008 . . Phosphomannomutase (5.4.2.8)
- 504/02009 . . Phosphoenolpyruvate mutase (5.4.2.9)
- 504/0201 . . Phosphoglucosamine mutase (5.4.2.10)
- 504/03 . . transferring amino groups (5.4.3)
- 504/03002 . . Lysine 2,3-aminomutase (5.4.3.2)
- 504/03003 . . Beta-lysine 5,6-aminomutase (5.4.3.3)
- 504/03004 . . D-Lysine 5,6-aminomutase (5.4.3.4)
- 504/03005 . . D-Ornithine 4,5-aminomutase (5.4.3.5)
- 504/03006 . . Tyrosine 2,3-aminomutase (5.4.3.6)
- 504/03007 . . Leucine 2,3-aminomutase (5.4.3.7)
- 504/03008 . . Glutamate-1-semialdehyde 2,1-aminomutase (5.4.3.8)
- 504/03009 . . Glutamate 2,3-aminomutase (5.4.3.9)
- 504/04 . . transferring hydroxy groups (5.4.4)
- 504/04001 . . (Hydroxyamino)benzene mutase (5.4.4.1)
- 504/04002 . . Isochorismate synthase (5.4.4.2)
- 504/04003 . . 3-(Hydroxyamino)phenol mutase (5.4.4.3)
- 504/04004 . . Geraniol isomerase (5.4.4.4)
- 504/04005 . . 9,12-Octadecadienoate 8-hydroperoxide 8R-isomerase (5.4.4.5)
- 504/04006 . . 9,12-Octadecadienoate 8-hydroperoxide 8S-isomerase (5.4.4.6)
- 504/99 . . transferring other groups (5.4.99)
- 504/99001 . . Methylaspartate mutase (5.4.99.1)
- 504/99002 . . Methylmalonyl-CoA mutase (5.4.99.2)
- 504/99003 . . 2-Acetolactate mutase (5.4.99.3)
- 504/99004 . . 2-Methyleneglutarate mutase (5.4.99.4)
- 504/99005 . . Chorismate mutase (5.4.99.5)
- 504/99007 . . Lanosterol synthase (5.4.99.7), i.e. oxidosqualene-lanosterol cyclase
- 504/99008 . . Cycloartenol synthase (5.4.99.8)
- 504/99009 . . UDP-galactopyranose mutase (5.4.99.9)
- 504/99011 . . Isomaltulose synthase (5.4.99.11)
- 504/99012 . . tRNA pseudouridine38-40 synthase (5.4.99.12)
- 504/99013 . . Isobutyryl-CoA mutase (5.4.99.13)
- 504/99014 . . 4-Carboxymethyl-4-methylbutenolide mutase (5.4.99.14)
- 504/99015 . . (1->4)-Alpha-D-glucan 1-alpha-D-glucosylmutase (5.4.99.15)
- 504/99016 . . Maltose alpha-D-glucosyltransferase (5.4.99.16)
- 504/99017 . . Squalene--hopene cyclase (5.4.99.17)
- 504/99018 . . 5-(Carboxyamino)imidazole ribonucleotide mutase (5.4.99.18)
- 504/99019 . . 16S rRNA pseudouridine516 synthase (5.4.99.19)
- 504/9902 . . 23S rRNA pseudouridine2457 synthase (5.4.99.20)
- 504/99021 . . 23S rRNA pseudouridine2604 synthase (5.4.99.21)
- 504/99022 . . 23S rRNA pseudouridine2605 synthase (5.4.99.22)
- 504/99023 . . 23S rRNA pseudouridine1911/1915/1917 synthase (5.4.99.23)
- 504/99024 . . 23S rRNA pseudouridine955/2504/2580 synthase (5.4.99.24)
- 504/99025 . . tRNA pseudouridine55 synthase (5.4.99.25)
- 504/99026 . . tRNA pseudouridine65 synthase (5.4.99.26)
- 504/99027 . . tRNA pseudouridine13 synthase (5.4.99.27)
- 504/99028 . . tRNA pseudouridine32 synthase (5.4.99.28)
- 504/99029 . . 23S rRNA pseudouridine746 synthase (5.4.99.29)
- 504/9903 . . UDP-arabinopyranose mutase (5.4.99.30)
- 504/99031 . . Thalianol synthase (5.4.99.31)
- 504/99032 . . Protostadienol synthase (5.4.99.32)
- 504/99033 . . Cucurbitadienol synthase (5.4.99.33)
- 504/99034 . . Germanicol synthase (5.4.99.34)
- 504/99035 . . Taraxerol synthase (5.4.99.35)
- 504/99036 . . Isomultiflorenol synthase (5.4.99.36)
- 504/99037 . . Dammaradiene synthase (5.4.99.37)
- 504/99038 . . Camelliol C synthase (5.4.99.38)
- 504/99039 . . Beta-amyirin synthase (5.4.99.39)
- 504/9904 . . Alpha-amyirin synthase (5.4.99.40)
- 504/99041 . . Lupeol synthase (5.4.99.41)
- 504/99042 . . tRNA pseudouridine31 synthase (5.4.99.42)
- 504/99043 . . 21S rRNA pseudouridine2819 synthase (5.4.99.43)
- 504/99044 . . Mitochondrial tRNA pseudouridine27/28 synthase (5.4.99.44)
- 504/99045 . . tRNA pseudouridine38/39 synthase (5.4.99.45)
- 504/99046 . . Shionone synthase (5.4.99.46)
- 504/99047 . . Parkeol synthase (5.4.99.47)
- 504/99048 . . Achilleol B synthase (5.4.99.48)
- 504/99049 . . Glutanol synthase (5.4.99.49)
- 504/9905 . . Friedelin synthase (5.4.99.50)
- 504/99051 . . Baccharis oxide synthase (5.4.99.51)
- 504/99052 . . Alpha-seco-amyirin synthase (5.4.99.52)
- 504/99053 . . Marnerial synthase (5.4.99.53)
- 504/99054 . . Beta-seco-amyirin synthase (5.4.99.54)
- 504/99055 . . Delta amyirin synthase (5.4.99.55)
- 504/99056 . . Tirucalladienol synthase (5.4.99.56)
- 504/99057 . . Baruol synthase (5.4.99.57)
- 504/99058 . . Methylornithine synthase (5.4.99.58)

**505/00 Intramolecular lyases (5.5)**

- 505/01 . Intramolecular lyases (5.5.1)
- 505/01001 . . Muconate cycloisomerase (5.5.1.1)
- 505/01002 . . 3-Carboxy-cis,cis-muconate cycloisomerase (5.5.1.2)
- 505/01003 . . Tetrahydroxypteridine cycloisomerase (5.5.1.3)
- 505/01004 . . Inositol-3-phosphate synthase (5.5.1.4)
- 505/01005 . . Carboxy-cis,cis-muconate cyclase (5.5.1.5)
- 505/01006 . . Chalcone isomerase (5.5.1.6)
- 505/01007 . . Chloromuconate cycloisomerase (5.5.1.7)
- 505/01008 . . Bornyl diphosphate synthase (5.5.1.8)
- 505/01009 . . Cycloeucaleanol cycloisomerase (5.5.1.9)
- 505/0101 . . Alpha-pinene-oxide decyclase (5.5.1.10)
- 505/01011 . . Dichloromuconate cycloisomerase (5.5.1.11)
- 505/01012 . . Copalyl diphosphate synthase (5.5.1.12)
- 505/01013 . . Ent-copalyl diphosphate synthase (5.5.1.13)
- 505/01014 . . Syn-copalyl-diphosphate synthase (5.5.1.14)
- 505/01015 . . Terpentadienyl-diphosphate synthase (5.5.1.15)
- 505/01016 . . Halimadienyl-diphosphate synthase (5.5.1.16)
- 505/01017 . . (S)-Beta-macrocarypene synthase (5.5.1.17)
- 505/01018 . . Lycopene epsilon-cyclase (5.5.1.18)
- 505/01019 . . Lycopene beta-cyclase (5.5.1.19)
- 505/0102 . . Prosolanapyrone-III cycloisomerase (5.5.1.20)
- 505/01022 . . (-)-Bornyl diphosphate synthase (5.5.1.22)

**599/00 Other isomerases (5.99)**

- 599/01 . Other isomerases (5.99.1)
- 599/01001 . . Thiocyanate isomerase (5.99.1.1)
- 599/01002 . . DNA topoisomerase (5.99.1.2)
- 599/01003 . . DNA topoisomerase (ATP-hydrolysing) (5.99.1.3)
- 599/01004 . . 2-Hydroxychromene-2-carboxylate isomerase (5.99.1.4)

**600/00 Ligases (6.)****601/00 Ligases forming carbon-oxygen bonds (6.1)**

- 601/01 . Ligases forming aminoacyl-tRNA and related compounds (6.1.1)
- 601/01001 . . Tyrosine-tRNA ligase (6.1.1.1)
- 601/01002 . . Tryptophan-tRNA ligase (6.1.1.2)
- 601/01003 . . Threonine-tRNA ligase (6.1.1.3)
- 601/01004 . . Leucine-tRNA ligase (6.1.1.4)
- 601/01005 . . Isoleucine-tRNA ligase (6.1.1.5)
- 601/01006 . . Lysine-tRNA ligase (6.1.1.6)
- 601/01007 . . Alanine--tRNA ligase (6.1.1.7)
- 601/01009 . . Valine--tRNA ligase (6.1.1.9)
- 601/0101 . . Methionine-tRNA ligase (6.1.1.10)
- 601/01011 . . Serine--tRNA ligase (6.1.1.11)
- 601/01012 . . Aspartate-tRNA ligase (6.1.1.12)
- 601/01013 . . D-Alanine--poly(phosphoribitol) ligase (6.1.1.13)
- 601/01014 . . Glycine-tRNA ligase (6.1.1.14)
- 601/01015 . . Proline--tRNA ligase (6.1.1.15)
- 601/01016 . . Cysteine-tRNA ligase (6.1.1.16)
- 601/01017 . . Glutamate-tRNA ligase (6.1.1.17)
- 601/01018 . . Glutamine--tRNA ligase (6.1.1.18)
- 601/01019 . . Arginine--tRNA ligase (6.1.1.19)
- 601/0102 . . Phenylalanine-tRNA ligase (6.1.1.20)
- 601/01021 . . Histidine-tRNA ligase (6.1.1.21)
- 601/01022 . . Asparagine-tRNA ligase (6.1.1.22)
- 601/01023 . . Aspartate--tRNA(Asn) ligase (6.1.1.23)
- 601/01024 . . Glutamate--tRNA(Gln) ligase (6.1.1.24)
- 601/01026 . . Pyrrolysine-tRNAPyl ligase (6.1.1.26)

- 601/01027 . . O-Phosphoserine--tRNA ligase (6.1.1.27)
- 601/02 . Acid--alcohol ligases (ester synthases)(6.1.2)
- 601/02001 . . D-Alanine--(R)-lactate ligase (6.1.2.1)

**602/00 Ligases forming carbon-sulfur bonds (6.2)**

- 602/01 . Acid-Thiol Ligases (6.2.1)
- 602/01001 . . Acetate-CoA ligase (6.2.1.1)
- 602/01002 . . Butyrate-CoA ligase (6.2.1.2)
- 602/01003 . . Long-chain-fatty-acid-CoA ligase (6.2.1.3)
- 602/01004 . . Succinate-CoA ligase (GDP-forming) (6.2.1.4)
- 602/01005 . . Succinate-CoA ligase (ADP-forming) (6.2.1.5)
- 602/01006 . . Glutarate--CoA ligase (6.2.1.6)
- 602/01007 . . Cholate--CoA ligase (6.2.1.7)
- 602/01008 . . Oxalate--CoA ligase (6.2.1.8)
- 602/01009 . . Malate--CoA ligase (6.2.1.9)
- 602/0101 . . Acid--CoA ligase (GDP-forming) (6.2.1.10)
- 602/01011 . . Biotin--CoA ligase (6.2.1.11)
- 602/01012 . . 4-Coumarate-CoA ligase (6.2.1.12)
- 602/01013 . . Acetate--CoA ligase (ADP-forming) (6.2.1.13)
- 602/01014 . . 6-Carboxyhexanoate--CoA ligase (6.2.1.14)
- 602/01015 . . Arachidonate--CoA ligase (6.2.1.15)
- 602/01016 . . Acetoacetate-CoA ligase (6.2.1.16)
- 602/01017 . . Propionate--CoA ligase (6.2.1.17)
- 602/01018 . . Citrate--CoA ligase (6.2.1.18)
- 602/01019 . . Long-chain-fatty-acid--luciferin-component ligase (6.2.1.19)
- 602/0102 . . Long-chain-fatty-acid--[acyl-carrier-protein] ligase (6.2.1.20)
- 602/01022 . . [Citrate (pro-3S)-lyase] ligase (6.2.1.22)
- 602/01023 . . Dicarboxylate--CoA ligase (6.2.1.23)
- 602/01024 . . Phytanate--CoA ligase (6.2.1.24)
- 602/01025 . . Benzoate--CoA ligase (6.2.1.25)
- 602/01026 . . O-Succinylbenzoate-CoA ligase (6.2.1.26)
- 602/01027 . . 4-Hydroxybenzoate--CoA ligase (6.2.1.27)
- 602/01028 . . 3-Alpha,7-alpha-dihydroxy-5-beta-cholestanate--CoA ligase (6.2.1.28)
- 602/0103 . . Phenylacetate--CoA ligase (6.2.1.30)
- 602/01031 . . 2-Furoate--CoA ligase (6.2.1.31)
- 602/01032 . . Anthranilate--CoA ligase (6.2.1.32)
- 602/01033 . . 4-Chlorobenzoate--CoA ligase (6.2.1.33)
- 602/01034 . . Trans-feruloyl-CoA synthase (6.2.1.34)
- 602/01035 . . ACP-SH:acetate ligase (6.2.1.35)
- 602/01036 . . 3-Hydroxypropionyl-CoA synthase (6.2.1.36)
- 602/01037 . . 3-Hydroxybenzoate--CoA ligase (6.2.1.37)
- 602/01038 . . (2,2,3-Trimethyl-5-oxocyclopent-3-enyl)acetyl-CoA synthase (6.2.1.38)
- 602/01039 . . [Butirosin acyl-carrier protein]--L-glutamate ligase (6.2.1.39)

**603/00 Ligases forming carbon-nitrogen bonds (6.3)**

- 603/01 . Acid-ammonia (or amine)ligases (amide synthases) (6.3.1)
- 603/01001 . . Aspartate--ammonia ligase (6.3.1.1)
- 603/01002 . . Glutamate-ammonia ligase (6.3.1.2)
- 603/01004 . . Aspartate--ammonia ligase (ADP-forming) (6.3.1.4)
- 603/01005 . . NAD<sup>+</sup> synthase (6.3.1.5)
- 603/01006 . . Glutamate--ethylamine ligase (6.3.1.6)
- 603/01007 . . 4-Methyleneglutamate--ammonia ligase (6.3.1.7)
- 603/01008 . . Glutathionylspermidine synthase (6.3.1.8)
- 603/01009 . . Trypanothione synthase (6.3.1.9)
- 603/0101 . . Adenosylcobinamide-phosphate synthase (6.3.1.10)

603/01011	. . Glutamate--putrescine ligase (6.3.1.11)	603/03004	. . (Carboxyethyl)arginine beta-lactam-synthase (6.3.3.4)
603/01012	. . D-Aspartate ligase (6.3.1.12)	603/04	. . Other carbon-nitrogen ligases (6.3.4)
603/01013	. . L-Cysteine:1D-myo-inositol 2-amino-2-deoxy-alpha-D-glucopyranoside ligase (6.3.1.13)	603/04001	. . GMP synthase (6.3.4.1)
603/01014	. . Diphthine--ammonia ligase (6.3.1.14)	603/04002	. . CTP synthase (6.3.4.2)
603/02	. . Acid--amino-acid ligases (peptide synthases)(6.3.2)	603/04003	. . Formate--tetrahydrofolate ligase (6.3.4.3)
603/02001	. . Pantoate-beta-alanine ligase (6.3.2.1)	603/04004	. . Adenylosuccinate synthase (6.3.4.4)
603/02002	. . Glutamate-cysteine ligase (6.3.2.2)	603/04005	. . Argininosuccinate synthase (6.3.4.5)
603/02003	. . Glutathione synthase (6.3.2.3)	603/04006	. . Urea carboxylase (6.3.4.6)
603/02004	. . D-Alanine-D-alanine ligase (6.3.2.4)	603/04007	. . Ribose-5-phosphate--ammonia ligase (6.3.4.7)
603/02005	. . Phosphopantothenate--cysteine ligase (6.3.2.5)	603/04008	. . Imidazoleacetate--phosphoribosyldiphosphate ligase (6.3.4.8)
603/02006	. . Phosphoribosylaminoimidazolesuccinocarboxamide synthase (6.3.2.6)	603/04009	. . Biotin--[methylmalonyl-CoA-carboxytransferase] ligase (6.3.4.9)
603/02007	. . UDP-N-acetylmuramoyl-L-alanyl-D-glutamate--L-lysine ligase (6.3.2.7)	603/0401	. . Biotin--[propionyl-CoA-carboxylase (ATP-hydrolyzing)] ligase (6.3.4.10)
603/02008	. . UDP-N-acetylmuramate-L-alanine ligase (6.3.2.8)	603/04011	. . Biotin--[methylcrotonoyl-CoA-carboxylase] ligase (6.3.4.11)
603/02009	. . UDP-N-acetylmuramoyl-L-alanine-D-glutamate ligase (6.3.2.9)	603/04012	. . Glutamate--methylamine ligase (6.3.4.12)
603/0201	. . UDP-N-acetylmuramoyl-tripeptide-D-alanyl-D-alanine ligase (6.3.2.10)	603/04013	. . Phosphoribosylamine-glycine ligase (6.3.4.13)
603/02011	. . Carnosine synthase (6.3.2.11)	603/04014	. . Biotin carboxylase (6.3.4.14)
603/02012	. . Dihydrofolate synthase (6.3.2.12)	603/04015	. . Biotin-[acetyl-CoA-carboxylase] ligase (6.3.4.15)
603/02013	. . UDP-N-acetylmuramoyl-L-alanyl-D-glutamate-2,6-diaminopimelate ligase (6.3.2.13)	603/04016	. . Carbamoyl-phosphate synthase (ammonia) (6.3.4.16)
603/02014	. . 2,3-Dihydroxybenzoate--serine ligase (6.3.2.14)	603/04017	. . Formate--dihydrofolate ligase (6.3.4.17)
603/02016	. . D-Alanine--alanyl-poly(glycerolphosphate) ligase (6.3.2.16)	603/04018	. . 5-(Carboxyamino)imidazole ribonucleotide synthase (6.3.4.18)
603/02017	. . Tetrahydrofolate synthase (6.3.2.17)	603/04019	. . tRNA(Ile)-lysine synthetase (6.3.4.19)
603/02018	. . Gamma-glutamylhistamine synthase (6.3.2.18)	603/0402	. . 7-Cyano-7-deazaguanine synthase (6.3.4.20)
603/02019	. . Ubiquitin-protein ligase (6.3.2.19), i.e. ubiquitin-conjugating enzyme	603/05	. . Carbon-nitrogen ligases with glutamine as amido-N-donor (6.3.5)
603/0202	. . Indoleacetate--lysine synthetase (6.3.2.20)	603/05001	. . NAD+ synthase (glutamine-hydrolyzing) (6.3.5.1)
603/02021	. . Ubiquitin--calmodulin ligase (6.3.2.21)	603/05002	. . GMP synthase (glutamine-hydrolysing) (6.3.5.2), i.e. glutamine amidotransferase
603/02023	. . Homoglutathione synthase (6.3.2.23)	603/05003	. . Phosphoribosylformylglycinamidase synthase (6.3.5.3)
603/02024	. . Tyrosine--arginine ligase (6.3.2.24)	603/05004	. . Asparagine synthase (glutamine-hydrolyzing) (6.3.5.4)
603/02025	. . Tubulin-tyrosine ligase (6.3.2.25)	603/05005	. . Carbamoyl-phosphate synthase (glutamine-hydrolysing) (6.3.5.5)
603/02026	. . N-(5-Amino-5-carboxypentanoyl)-L-cysteinyl-D-valine synthase (6.3.2.26)	603/05006	. . Asparaginyl-tRNA synthase (glutamine-hydrolyzing) (6.3.5.6)
603/02028	. . L-Amino-acid alpha-ligase (6.3.2.28)	603/05007	. . GlutaminytRNA synthase (glutamine-hydrolyzing) (6.3.5.7)
603/02029	. . Cyanophycin synthase (L-aspartate-adding) (6.3.2.29)	603/05009	. . Hydrogenobyrinic acid a,c-diamide synthase (glutamine-hydrolyzing) (6.3.5.9)
603/0203	. . Cyanophycin synthase (L-arginine-adding) (6.3.2.30)	603/0501	. . Adenosylcobyric acid synthase (glutamine-hydrolyzing) (6.3.5.10)
603/02031	. . Coenzyme F420-0:L-glutamate ligase (6.3.2.31)	603/05011	. . Cobyrrinate a,c-diamide synthase (glutamine-hydrolyzing) (6.3.5.11)
603/02032	. . Coenzyme gamma-F420-2:alpha-L-glutamate ligase (6.3.2.32)	<b>604/00</b>	<b>Ligases forming carbon-carbon bonds (6.4)</b>
603/02033	. . Tetrahydrosarcinapterin synthase (6.3.2.33)	604/01	. . Ligases forming carbon-carbon bonds (6.4.1)
603/02034	. . Coenzyme F420-1:gamma-L-glutamate ligase (6.3.2.34)	604/01001	. . Pyruvate carboxylase (6.4.1.1)
603/02035	. . D-Alanine--D-serine ligase (6.3.2.35)	604/01002	. . Acetyl-CoA carboxylase (6.4.1.2)
603/02036	. . 4-Phosphopantoate--beta-alanine ligase (6.3.2.36)	604/01003	. . Propionyl-CoA carboxylase (6.4.1.3)
603/02037	. . UDP-N-acetylmuramoyl-L-alanyl-D-glutamate--D-lysine ligase (6.3.2.37)	604/01004	. . Methylcrotonoyl-CoA carboxylase (6.4.1.4)
603/02038	. . N2-Citryl-N6-acetyl-N6-hydroxylysine synthase (6.3.2.38)	604/01005	. . Geranoyl-CoA carboxylase (6.4.1.5)
603/02039	. . Aerobactin synthase (6.3.2.39)	604/01006	. . Acetone carboxylase (6.4.1.6)
603/03	. . Cyclo-ligases (6.3.3)	604/01007	. . 2-Oxoglutarate carboxylase (6.4.1.7)
603/03001	. . Phosphoribosylformylglycinamidase cyclo-ligase (6.3.3.1)	604/01008	. . Acetophenone carboxylase (6.4.1.8)
603/03002	. . 5-Formyltetrahydrofolate cyclo-ligase (6.3.3.2)	<b>605/00</b>	<b>Ligases forming phosphoric ester bonds (6.5)</b>
603/03003	. . Dethiobiotin synthase (6.3.3.3)		

- 605/01 . forming phosphoric ester bonds (6.5.1)
- 605/01001 . . DNA ligase (ATP) (6.5.1.1)
- 605/01002 . . DNA ligase (NAD<sup>+</sup>) (6.5.1.2)
- 605/01003 . . RNA ligase (ATP) (6.5.1.3)
- 605/01004 . . RNA-3'-phosphate cyclase (6.5.1.4)

**606/00 Ligases forming nitrogen-metal bonds (6.6)**

- 606/01 . forming coordination complexes (6.6.1)
- 606/01001 . . Magnesium chelatase (6.6.1.1)
- 606/01002 . . Cobaltochelatase (6.6.1.2)