

# CPC COOPERATIVE PATENT CLASSIFICATION

## C CHEMISTRY; METALLURGY

(NOTES omitted)

### CHEMISTRY

## C12 BIOCHEMISTRY; BEER; SPIRITS; WINE; VINEGAR; MICROBIOLOGY; ENZYMOLOGY; MUTATION OR GENETIC ENGINEERING

(NOTES omitted)

## 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 used

Examples:

  - 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](#)
  - Cobaltochelatase: 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.

## C12Y

## C12Y

(continued)

5. The classification symbols of this subclass are not listed first when assigned to patent documents.

**101/00 Oxidoreductases acting on the CH-OH group of donors (1.1)**101/01 . . with NAD<sup>+</sup> or NADP<sup>+</sup> as acceptor (1.1.1)

101/01001 . . Alcohol dehydrogenase (1.1.1.1)

101/01002 . . Alcohol dehydrogenase (NADP<sup>+</sup>) (1.1.1.2), i.e. aldehyde reductase

101/01003 . . Homoserine dehydrogenase (1.1.1.3)

101/01004 . . R,R-butenediol dehydrogenase (1.1.1.4)

101/01005 . . Acetoin dehydrogenase (1.1.1.5)  
([C12Y 101/01303](#), [C12Y 101/01304](#) takes precedence)

101/01006 . . Glycerol dehydrogenase (1.1.1.6)

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

101/0101 . . L-Xylulose reductase (1.1.1.10)

101/01011 . . D-Arabinitol 4-dehydrogenase (1.1.1.11)

101/01012 . . L-Arabinitol 4-dehydrogenase (1.1.1.12)

101/01013 . . L-Arabinitol 2-dehydrogenase (1.1.1.13)

101/01014 . . L-Iditol 2-dehydrogenase (1.1.1.14), i.e. sorbitol-dehydrogenase

101/01015 . . D-iditol 2-dehydrogenase (1.1.1.15)

101/01016 . . Galactitol 2-dehydrogenase (1.1.1.16)

101/01017 . . Mannitol-1-phosphate 5-dehydrogenase (1.1.1.17)

101/01018 . . Inositol 2-dehydrogenase (1.1.1.18)

101/01019 . . Glucuronate reductase (1.1.1.19)

101/0102 . . Glucuronolactone reductase (1.1.1.20)

101/01021 . . Aldehyde reductase (1.1.1.21), i.e. aldose-reductase

101/01022 . . UDP-glucose 6-dehydrogenase (1.1.1.22)

101/01023 . . Histidinol dehydrogenase (1.1.1.23)

101/01024 . . Quinate dehydrogenase (1.1.1.24)

101/01025 . . Shikimate dehydrogenase (1.1.1.25)

101/01026 . . Glyoxylate reductase (1.1.1.26)

101/01027 . . L-Lactate dehydrogenase (1.1.1.27)

101/01028 . . D-Lactate dehydrogenase (1.1.1.28)

101/01029 . . Glycerate dehydrogenase (1.1.1.29)

101/0103 . . 3-Hydroxybutyrate dehydrogenase (1.1.1.30)

101/01031 . . 3-Hydroxyisobutyrate dehydrogenase (1.1.1.31)

101/01032 . . Mevaldate reductase (1.1.1.32)

101/01033 . . Mevaldate reductase (NADPH) (1.1.1.33)

101/01034 . . Hydroxymethylglutaryl-CoA reductase (NADPH) (1.1.1.34)

101/01035 . . 3-Hydroxyacyl-CoA dehydrogenase (1.1.1.35)

101/01036 . . Acetoacetyl-CoA reductase (1.1.1.36)

101/01037 . . Malate dehydrogenase (1.1.1.37)

101/01038 . . Malate dehydrogenase (oxaloacetate-decarboxylating) (1.1.1.38)

101/01039 . . Malate dehydrogenase (decarboxylating) (1.1.1.39)

101/0104 . . Malate dehydrogenase (oxaloacetate-decarboxylating) (NADP<sup>+</sup>) (1.1.1.40)101/01041 . . Isocitrate dehydrogenase (NAD<sup>+</sup>) (1.1.1.41)101/01042 . . Isocitrate dehydrogenase (NADP<sup>+</sup>) (1.1.1.42)

101/01043 . . Phosphogluconate 2-dehydrogenase (1.1.1.43)

101/01044 . . Phosphogluconate dehydrogenase (decarboxylating) (1.1.1.44)

101/01045 . . L-Gulonate 3-dehydrogenase (1.1.1.45)

101/01046 . . L-Arabinose 1-dehydrogenase (1.1.1.46)

101/01047 . . Glucose 1-dehydrogenase (1.1.1.47)

101/01048 . . D-Galactose 1-dehydrogenase (1.1.1.48)

101/01049 . . Glucose-6-phosphate dehydrogenase (1.1.1.49)

101/0105 . . 3Alpha-hydroxysteroid 3-dehydrogenase (B-specific) (1.1.1.50)

101/01051 . . 3 (or 17)-Beta-hydroxysteroid dehydrogenase (1.1.1.51)

101/01052 . . 3-Alpha-hydroxycholanate dehydrogenase (1.1.1.52)

101/01053 . . 3-Alpha (or 20-beta)-hydroxysteroid dehydrogenase (1.1.1.53)

101/01054 . . Allyl-alcohol dehydrogenase (1.1.1.54)

101/01055 . . Lactaldehyde reductase (NADPH) (1.1.1.55)

101/01056 . . Ribitol 2-dehydrogenase (1.1.1.56)

101/01057 . . Fructuronate reductase (1.1.1.57)

101/01058 . . Tagaturonate reductase (1.1.1.58)

101/01059 . . 3-Hydroxypropionate dehydrogenase (1.1.1.59)

101/0106 . . 2-Hydroxy-3-oxopropionate reductase (1.1.1.60)

101/01061 . . 4-Hydroxybutyrate dehydrogenase (1.1.1.61)

101/01062 . . 17Beta-estradiol 17-dehydrogenase (1.1.1.62)

101/01064 . . Testosterone 17-beta-dehydrogenase (NADP<sup>+</sup>) (1.1.1.64)

101/01065 . . Pyridoxine 4-dehydrogenase (1.1.1.65)

101/01066 . . Omega-hydroxydecanoate dehydrogenase (1.1.1.66)

101/01067 . . Mannitol 2-dehydrogenase (1.1.1.67)

101/01069 . . Gluconate 5-dehydrogenase (1.1.1.69)

101/01071 . . Alcohol dehydrogenase [NAD(P)<sup>+</sup>] (1.1.1.71)101/01072 . . Glycerol dehydrogenase (NADP<sup>+</sup>) (1.1.1.72)

101/01073 . . Octanol dehydrogenase (1.1.1.73)

101/01075 . . (R)-Aminopropanol dehydrogenase (1.1.1.75)

101/01076 . . (S,S)-Butanediol dehydrogenase (1.1.1.76)

101/01077 . . Lactaldehyde reductase (1.1.1.77)

101/01078 . . Methylglyoxal reductase (NADH-dependent) (1.1.1.78)

101/01079 . . Glyoxylate reductase (NADP<sup>+</sup>) (1.1.1.79)101/0108 . . Isopropanol dehydrogenase (NADP<sup>+</sup>) (1.1.1.80)

101/01081 . . Hydroxypyruvate reductase (1.1.1.81)

101/01082 . . Malate dehydrogenase (NADP<sup>+</sup>) (1.1.1.82)

101/01083 . . D-Malate dehydrogenase (decarboxylating) (1.1.1.83)

101/01084 . . Dimethylmalate dehydrogenase (1.1.1.84)

101/01085 . . 3-Isopropylmalate dehydrogenase (1.1.1.85)

101/01086 . . Ketol-acid reductoisomerase (1.1.1.86)

101/01087 . . Homoisocitrate dehydrogenase (1.1.1.87)

101/01088 . . Hydroxymethylglutaryl-CoA reductase (1.1.1.88)

101/0109 . . Aryl-alcohol dehydrogenase (1.1.1.90)

101/01091 . . Aryl-alcohol dehydrogenase (NADP<sup>+</sup>) (1.1.1.91)

101/01092 . . Oxaloglycolate reductase (decarboxylating) (1.1.1.92)

101/01093 . . Tartrate dehydrogenase (1.1.1.93)

101/01094 . . Glycerol-3-phosphate dehydrogenase (NAD(P)<sup>+</sup>) (1.1.1.94)

101/01095 . . Phosphoglycerate dehydrogenase (1.1.1.95)

101/01096 . . Diiodophenylpyruvate reductase (1.1.1.96)

101/01097 . . 3-Hydroxybenzyl-alcohol dehydrogenase (1.1.1.97)

101/01098	. . (R)-2-Hydroxy-fatty-acid dehydrogenase (1.1.1.98)	101/01147	. . 16-Alpha-hydroxysteroid dehydrogenase (1.1.1.147)
101/01099	. . (S)-2-Hydroxy-fatty-acid dehydrogenase (1.1.1.99)	101/01148	. . Estradiol 17alpha-dehydrogenase (1.1.1.148)
101/011	. . 3-Oxoacyl-[acyl-carrier-protein] reductase (1.1.1.100)	101/01149	. . 20-Alpha-hydroxysteroid dehydrogenase (1.1.1.149)
101/01101	. . Acylglycerone-phosphate reductase (1.1.1.101)	101/0115	. . 21-Hydroxysteroid dehydrogenase (NAD+) (1.1.1.150)
101/01102	. . 3-Dehydrosphinganine reductase (1.1.1.102)	101/01151	. . 21-Hydroxysteroid dehydrogenase (NADP+) (1.1.1.151)
101/01103	. . L-Threonine 3-dehydrogenase (1.1.1.103)	101/01152	. . 3-Alpha-hydroxy-5-beta-androstane-17-one 3-alpha-dehydrogenase (1.1.1.152)
101/01104	. . 4-Oxoproline reductase (1.1.1.104)	101/01153	. . Sepiapterin reductase (L-erythro-7,8-dihydrobiopterin forming) (1.1.1.153)
101/01105	. . Retinol dehydrogenase (1.1.1.105)	101/01154	. . Ureidoglycolate dehydrogenase (1.1.1.154)
101/01106	. . Pantoate 4-dehydrogenase (1.1.1.106)	101/01156	. . Glycerol 2-dehydrogenase (NADP+) (1.1.1.156)
101/01107	. . Pyridoxal 4-dehydrogenase (1.1.1.107)	101/01157	. . 3-Hydroxybutyryl-CoA dehydrogenase (1.1.1.157)
101/01108	. . Carnitine 3-dehydrogenase (1.1.1.108)	101/01158	. . UDP-N-acetylmuramate dehydrogenase (1.1.1.158), i.e. UDP-N-acetylenolpyruvoylglucosamine reductase
101/0111	. . Indolelactate dehydrogenase (1.1.1.110)	101/01159	. . 7-Alpha-hydroxysteroid dehydrogenase (1.1.1.159)
101/01111	. . 3-(Imidazol-5-yl)lactate dehydrogenase (1.1.1.111)	101/0116	. . Dihydrobunolol dehydrogenase (1.1.1.160)
101/01112	. . Indanol dehydrogenase (1.1.1.112)	101/01162	. . Erythrulose reductase (1.1.1.162)
101/01113	. . L-Xylose 1-dehydrogenase (1.1.1.113)	101/01163	. . Cyclopentanol dehydrogenase (1.1.1.163)
101/01114	. . Apiose 1-reductase (1.1.1.114)	101/01164	. . Hexadecanol dehydrogenase (1.1.1.164)
101/01115	. . Ribose 1-dehydrogenase (NADP+) (1.1.1.115)	101/01165	. . 2-Alkyn-1-ol dehydrogenase (1.1.1.165)
101/01116	. . D-Arabinose 1-dehydrogenase (1.1.1.116)	101/01166	. . Hydroxycyclohexanecarboxylate dehydrogenase (1.1.1.166)
101/01117	. . D-Arabinose 1-dehydrogenase (NAD(P)+) (1.1.1.117)	101/01167	. . Hydroxymalonate dehydrogenase (1.1.1.167)
101/01118	. . Glucose 1-dehydrogenase (NAD+) (1.1.1.118)	101/01168	. . 2-Dehydropantolactone reductase (A-specific) (1.1.1.168)
101/01119	. . Glucose 1-dehydrogenase (NADP+) (1.1.1.119)	101/01169	. . 2-Dehydropantoate 2-reductase (1.1.1.169), i.e. ketopantoate-reductase
101/0112	. . Galactose 1-dehydrogenase (NADP+) (1.1.1.120)	101/0117	. . 3Beta-hydroxy-4alpha-carboxy-sterol 3-dehydrogenase (decarboxylating) (1.1.1.170)
101/01121	. . Aldose 1-dehydrogenase (1.1.1.121)	101/01172	. . 2-Oxadipate reductase (1.1.1.172)
101/01122	. . D-Threo-aldose 1-dehydrogenase (1.1.1.122)	101/01173	. . L-Rhamnose 1-dehydrogenase (1.1.1.173)
101/01123	. . Sorbose 5-dehydrogenase (NADP+) (1.1.1.123)	101/01174	. . Cyclohexane-1,2-diol dehydrogenase (1.1.1.174)
101/01124	. . Fructose 5-dehydrogenase (NADP+) (1.1.1.124)	101/01175	. . D-Xylose 1-dehydrogenase (1.1.1.175)
101/01125	. . 2-Deoxy-D-gluconate 3-dehydrogenase (1.1.1.125)	101/01176	. . 12-Alpha-hydroxysteroid dehydrogenase (1.1.1.176)
101/01126	. . 2-Dehydro-3-deoxy-D-gluconate 6-dehydrogenase (1.1.1.126)	101/01177	. . Glycerol-3-phosphate 1-dehydrogenase (NADP+) (1.1.1.177)
101/01127	. . 2-Dehydro-3-deoxy-D-gluconate 5-dehydrogenase (1.1.1.127)	101/01178	. . 3-Hydroxy-2-methylbutyryl-CoA dehydrogenase (1.1.1.178)
101/01129	. . L-Threonate 3-dehydrogenase (1.1.1.129)	101/01179	. . D-Xylose 1-dehydrogenase (NADP+) (1.1.1.179)
101/0113	. . 3-Dehydro-L-gulonate 2-dehydrogenase (1.1.1.130)	101/01181	. . Cholest-5-ene-3-beta,7-alpha-diol 3-beta-dehydrogenase (1.1.1.181)
101/01131	. . Mannuronate reductase (1.1.1.131)	101/01182	. . Fenchol dehydrogenase (1.1.1.182) <a href="#">(C12Y 101/01198, C12Y 101/01227, C12Y 101/01228 take precedence)</a>
101/01132	. . GDP-mannose 6-dehydrogenase (1.1.1.132)	101/01183	. . Geraniol dehydrogenase (1.1.1.183)
101/01133	. . dTDP-4-dehydrorhamnose reductase (1.1.1.133)	101/01184	. . Carbonyl reductase (NADPH) (1.1.1.184)
101/01134	. . dTDP-6-deoxy-L-talose 4-dehydrogenase (1.1.1.134)	101/01185	. . L-Glycol dehydrogenase (1.1.1.185)
101/01135	. . GDP-6-deoxy-D-talose 4-dehydrogenase (1.1.1.135)	101/01186	. . dTDP-galactose 6-dehydrogenase (1.1.1.186)
101/01136	. . UDP-N-acetylglucosamine 6-dehydrogenase (1.1.1.136)	101/01187	. . GDP-4-dehydro-D-rhamnose reductase (1.1.1.187)
101/01137	. . Ribitol-5-phosphate 2-dehydrogenase (1.1.1.137)	101/01188	. . Prostaglandin-F synthase (1.1.1.188)
101/01138	. . Mannitol 2-dehydrogenase (NADP+) (1.1.1.138)	101/01189	. . Prostaglandin-E(2) 9-reductase (1.1.1.189)
101/0114	. . Sorbitol-6-phosphate 2-dehydrogenase (1.1.1.140)	101/0119	. . Indole-3-acetaldehyde reductase (NADH) (1.1.1.190)
101/01141	. . 15-Hydroxyprostaglandin dehydrogenase (NAD+) (1.1.1.141)		
101/01142	. . D-Pinitol dehydrogenase (1.1.1.142)		
101/01143	. . Sequoyitol dehydrogenase (1.1.1.143)		
101/01144	. . Perillyl-alcohol dehydrogenase (1.1.1.144)		
101/01145	. . 3-Beta-hydroxy-DELTA5-steroid dehydrogenase (1.1.1.145)		
101/01146	. . 11-Beta-hydroxysteroid dehydrogenase (1.1.1.146)		

101/01191	. . Indole-3-acetaldehyde reductase (NADPH) (1.1.1.191)	101/01233	. . N-Acylmannosamine 1-dehydrogenase (1.1.1.233)
101/01192	. . Long-chain-alcohol dehydrogenase (1.1.1.192)	101/01234	. . Flavanone 4-reductase (1.1.1.234)
101/01193	. . 5-Amino-6-(5-phosphoribosylamino)uracil reductase (1.1.1.193)	101/01235	. . 8-Oxocoformycin reductase (1.1.1.235)
101/01194	. . Coniferyl-alcohol dehydrogenase (1.1.1.194)	101/01236	. . Tropinone reductase II (1.1.1.236)
101/01195	. . Cinnamyl-alcohol dehydrogenase (1.1.1.195)	101/01237	. . Hydroxyphenylpyruvate reductase (1.1.1.237)
101/01196	. . 15-Hydroxyprostaglandin-D dehydrogenase (NADP+) (1.1.1.196)	101/01238	. . 12-Beta-hydroxysteroid dehydrogenase (1.1.1.238)
101/01197	. . 15-Hydroxyprostaglandin dehydrogenase (NADP+) (1.1.1.197)	101/01239	. . 3Alpha(17beta)-hydroxysteroid dehydrogenase (NAD+) (1.1.1.239), i.e. testosterone 17beta-dehydrogenase
101/01198	. . (+)-Borneol dehydrogenase (1.1.1.198)	101/0124	. . N-Acetylhexosamine 1-dehydrogenase (1.1.1.240)
101/01199	. . (S)-Usnate reductase (1.1.1.199)	101/01241	. . 6-Endo-hydroxycineole dehydrogenase (1.1.1.241)
101/012	. . Aldose-6-phosphate reductase (NADPH) (1.1.1.200)	101/01243	. . Carveol dehydrogenase (1.1.1.243)
101/01201	. . 7-Beta-hydroxysteroid dehydrogenase (NADP+) (1.1.1.201)	101/01244	. . Methanol dehydrogenase (1.1.1.244)
101/01202	. . 1,3-Propanediol dehydrogenase (1.1.1.202)	101/01245	. . Cyclohexanol dehydrogenase (1.1.1.245)
101/01203	. . Uronate dehydrogenase (1.1.1.203)	101/01246	. . Pterocarpin synthase (1.1.1.246)
101/01205	. . IMP dehydrogenase (1.1.1.205)	101/01247	. . Codeinone reductase (NADPH) (1.1.1.247)
101/01206	. . Tropinone reductase I (1.1.1.206)	101/01248	. . Salutaridine reductase (NADPH) (1.1.1.248)
101/01207	. . (-)-Menthol dehydrogenase (1.1.1.207)	101/0125	. . D-Arabinitol 2-dehydrogenase (1.1.1.250)
101/01208	. . (+)-Neomenthol dehydrogenase (1.1.1.208)	101/01251	. . Galactitol-1-phosphate 5-dehydrogenase (1.1.1.251)
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-hydroxyglycylrrhetinate 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)
		101/01277	. . 3-Beta-hydroxy-5-beta-steroid dehydrogenase (1.1.1.277)
		101/01278	. . 3-Beta-hydroxy-5-alpha-steroid dehydrogenase (1.1.1.278)

101/01279	. . (R)-3-Hydroxyacid-ester dehydrogenase (1.1.1.279)	101/01323	. . (+)-Thujan-3-ol dehydrogenase (1.1.1.323)
101/0128	. . (S)-3-Hydroxyacid-ester dehydrogenase (1.1.1.280)	101/01324	. . 8-Hydroxygeraniol dehydrogenase (1.1.1.324)
101/01281	. . GDP-4-dehydro-6-deoxy-D-mannose reductase (1.1.1.281)	101/01325	. . Sepiapterin reductase (L-threo-7,8-dihydrobiopterin forming) (1.1.1.325)
101/01282	. . Quinate/shikimate dehydrogenase (1.1.1.282)	101/01326	. . Zerumbone synthase (1.1.1.326)
101/01283	. . Methylglyoxal reductase (NADPH-dependent) (1.1.1.283)	101/01327	. . 5-Exo-hydroxycamphor dehydrogenase (1.1.1.327)
101/01284	. . S-(hydroxymethyl)glutathione dehydrogenase (1.1.1.284), i.e. nitroreductase	101/01328	. . Nicotine blue oxidoreductase (1.1.1.328)
101/01285	. . 3"-Deamino-3"-oxonicotianamine reductase (1.1.1.285)	101/01329	. . 2-Deoxy-scylo-inosamine dehydrogenase (1.1.1.329)
101/01286	. . Isocitrate--homoisocitrate dehydrogenase (1.1.1.286)	101/0133	. . Very-long-chain 3-oxoacyl-CoA reductase (1.1.1.330)
101/01287	. . D-Arabinitol dehydrogenase (NADP+) (1.1.1.287)	101/01331	. . Secoisolariciresinol dehydrogenase (1.1.1.331)
101/01288	. . Xanthoxin dehydrogenase (1.1.1.288)	101/01332	. . Chanoclavine-I dehydrogenase (1.1.1.332)
101/01289	. . Sorbose reductase (1.1.1.289)	101/01333	. . Decaprenylphospho-beta-D-erythro-pentofuranosid-2-ulose 2-reductase (1.1.1.333)
101/0129	. . 4-Phosphoerythronate dehydrogenase (1.1.1.290)	101/01334	. . Methylecgonone reductase (1.1.1.334)
101/01291	. . 2-Hydroxymethylglutarate dehydrogenase (1.1.1.291)	101/01335	. . UDP-N-acetyl-2-amino-2-deoxyglucuronate dehydrogenase (1.1.1.335)
101/01292	. . 1,5-Anhydro-D-fructose reductase (1,5-anhydro-D-mannitol-forming) (1.1.1.292)	101/01336	. . UDP-N-acetyl-D-mannosamine dehydrogenase (1.1.1.336)
101/01294	. . Chlorophyll(ide) b reductase (1.1.1.294)	101/01337	. . L-2-Hydroxycarboxylate dehydrogenase (NAD+) (1.1.1.337)
101/01295	. . Momilactone-A synthase (1.1.1.295)	101/01338	. . (2R)-3-Sulfolactate dehydrogenase (NADP+) (1.1.1.338)
101/01296	. . Dihydrocarveol dehydrogenase (1.1.1.296)	101/01339	. . dTDP-6-deoxy-L-talose 4-dehydrogenase (NAD+) (1.1.1.339)
101/01297	. . Limonene-1,2-diol dehydrogenase (1.1.1.297)	101/0134	. . 1-Deoxy-11beta-hydroxypentalenate dehydrogenase (1.1.1.340)
101/01298	. . 3-Hydroxypropionate dehydrogenase (NADP+) (1.1.1.298)	101/01341	. . CDP-abequose synthase (1.1.1.341)
101/01299	. . Malate dehydrogenase (NAD(P)+)(1.1.1.299)	101/01342	. . CDP-paratose synthase (1.1.1.342)
101/013	. . NADP-retinol dehydrogenase (1.1.1.300)	101/01817	. . Sulfoacetaldehyde reductase (1.1.1.B17)
101/01301	. . D-Arabitol-phosphate dehydrogenase (1.1.1.301)	101/02	. . with a cytochrome as acceptor (1.1.2)
101/01302	. . 2,5-Diamino-6-(ribosylamino)-4(3H)-pyrimidinone 5'-phosphate reductase (1.1.1.302)	101/02002	. . Mannitol dehydrogenase (cytochrome) (1.1.2.2)
101/01303	. . Diacetyl reductase, [(R)-acetoin forming] (1.1.1.303)	101/02003	. . L-Lactate dehydrogenase (cytochrome) (1.1.2.3)
101/01304	. . Diacetyl reductase, (S)-acetoin forming (1.1.1.304)	101/02004	. . D-lactate dehydrogenase (cytochrome) (1.1.2.4)
101/01305	. . UDP-glucuronic acid dehydrogenase (UDP-4-keto-hexauronic acid decarboxylating)(1.1.1.305)	101/02005	. . D-Lactate dehydrogenase (cytochrome c-553) (1.1.2.5)
101/01306	. . S-(Hydroxymethyl)mycothiol dehydrogenase (1.1.1.306)	101/02006	. . Polyvinyl alcohol dehydrogenase (cytochrome) (1.1.2.6)
101/01307	. . D-Xylose reductase (1.1.1.307)	101/02007	. . Methanol dehydrogenase (cytochrome c)(1.1.2.7)
101/01308	. . Sulfopropanediol 3-dehydrogenase (1.1.1.308)	101/02008	. . Alcohol dehydrogenase (cytochrome c)(1.1.2.8)
101/01309	. . Phosphonoacetaldehyde reductase (NADH) (1.1.1.309)	101/03	. . with a oxygen as acceptor (1.1.3)
101/0131	. . (S)-Sulfolactate dehydrogenase (1.1.1.310)	101/03003	. . Malate oxidase (1.1.3.3)
101/01311	. . (S)-1-Phenylethanol dehydrogenase (1.1.1.311)	101/03004	. . Glucose oxidase (1.1.3.4)
101/01312	. . 2-Hydroxy-4-carboxymuconate semialdehyde hemiacetal dehydrogenase (1.1.1.312)	101/03005	. . Hexose oxidase (1.1.3.5)
101/01313	. . Sulfoacetaldehyde reductase (1.1.1.313)	101/03006	. . Cholesterol oxidase (1.1.3.6)
101/01314	. . Germacrene A alcohol dehydrogenase (1.1.1.314)	101/03007	. . Aryl-alcohol oxidase (1.1.3.7)
101/01315	. . 11-Cis-retinol dehydrogenase (1.1.1.315)	101/03008	. . L-Gulonolactone oxidase (1.1.3.8)
101/01316	. . L-Galactose 1-dehydrogenase (1.1.1.316)	101/03009	. . Galactose oxidase (1.1.3.9)
101/01317	. . Perakine reductase (1.1.1.317)	101/0301	. . Pyranose oxidase (1.1.3.10)
101/01318	. . Eugenol synthase (1.1.1.318)	101/03011	. . L-sorbose oxidase (1.1.3.11)
101/01319	. . Isoeugenol synthase (1.1.1.319)	101/03012	. . Pyridoxine 4-oxidase (1.1.3.12)
101/0132	. . Benzil reductase [(S)-benzoin forming] (1.1.1.320)	101/03013	. . Alcohol oxidase (1.1.3.13)
101/01321	. . Benzil reductase [(R)-benzoin forming] (1.1.1.321)	101/03014	. . Catechol oxidase (dimerizing) (1.1.3.14)
101/01322	. . (-)-Endo-fenchol dehydrogenase (1.1.1.322)	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)	101/9903	. . 2-Oxo-acid reductase (1.1.99.30)
101/03027	. . Hydroxyphytanate oxidase (1.1.3.27)	101/99031	. . (S)-Mandelate dehydrogenase (1.1.99.31)
101/03028	. . Nucleoside oxidase (1.1.3.28)	101/99032	. . L-Sorbose 1-dehydrogenase (1.1.99.32)
101/03029	. . N-Acylhexosamine oxidase (1.1.3.29)	101/99033	. . Formate dehydrogenase (acceptor) (1.1.99.33)
101/0303	. . Polyvinyl-alcohol oxidase (1.1.3.30)	101/99035	. . Soluble quinoprotein glucose dehydrogenase (1.1.99.35)
101/03037	. . D-Arabinono-1,4-lactone oxidase (1.1.3.37)	101/99036	. . NDMA-dependent alcohol dehydrogenase (1.1.99.36)
101/03038	. . Vanillyl-alcohol oxidase (1.1.3.38)	101/99037	. . NDMA-dependent methanol dehydrogenase (1.1.99.37)
101/03039	. . Nucleoside oxidase (H <sub>2</sub> O <sub>2</sub> -forming) (1.1.3.39)	101/99038	. . 2-Deoxy-scylo-inosamine dehydrogenase (SAM-dependent) (1.1.99.38)
101/0304	. . D-Mannitol oxidase (1.1.3.40)		
101/03041	. . Alditol oxidase (1.1.3.41)	<b>102/00</b>	<b>Oxidoreductases acting on the aldehyde or oxo group of donors (1.2)</b>
101/03042	. . Prosolanapyrone-II oxidase (1.1.3.42)	102/01	. . with NAD <sup>+</sup> or NADP <sup>+</sup> as acceptor (1.2.1)
101/03043	. . Paromamine 6'-oxidase (1.1.3.43)	102/01001	. . Formaldehyde dehydrogenase (glutathione) (1.2.1.1) ( <a href="#">C12Y 101/01284</a> , <a href="#">C12Y 404/01022 take precedence</a> )
101/03044	. . 6'''-Hydroxyneomycin C oxidase (1.1.3.44)	102/01002	. . Formate dehydrogenase (1.2.1.2)
101/04	. . with a disulfide as acceptor (1.1.4)	102/01003	. . Aldehyde dehydrogenase (NAD <sup>+</sup> ) (1.2.1.3)
101/04001	. . Vitamin-K-epoxide reductase (warfarin-sensitive) (1.1.4.1)	102/01004	. . Aldehyde dehydrogenase (NADP <sup>+</sup> ) (1.2.1.4)
101/04002	. . Vitamin-K-epoxide reductase (warfarin-insensitive) (1.1.4.2)	102/01005	. . Aldehyde dehydrogenase [NAD(P) <sup>+</sup> ] (1.2.1.5)
101/05	. . with a quinone or similar compound as acceptor (1.1.5)	102/01007	. . Benzaldehyde dehydrogenase (NADP <sup>+</sup> ) (1.2.1.7)
101/05002	. . Quinoprotein glucose dehydrogenase (1.1.5.2)	102/01008	. . Betaine-aldehyde dehydrogenase (NADH) (1.2.1.8)
101/05003	. . Glycerol-3-phosphate dehydrogenase (1.1.5.3)	102/01009	. . Glyceraldehyde-3-phosphate dehydrogenase (NADP <sup>+</sup> ) (1.2.1.9)
101/05004	. . Malate dehydrogenase (quinone) (1.1.5.4)	102/0101	. . Acetaldehyde dehydrogenase (acetylating) (1.2.1.10)
101/05005	. . Alcohol dehydrogenase (quinone) (1.1.5.5)	102/01011	. . Aspartate-semialdehyde dehydrogenase (1.2.1.11)
101/05006	. . Formate dehydrogenase-N (1.1.5.6)	102/01012	. . Glyceraldehyde-3-phosphate dehydrogenase (phosphorylating) (1.2.1.12)
101/05007	. . Cyclic alcohol dehydrogenase (quinone) (1.1.5.7)	102/01013	. . Glyceraldehyde-3-phosphate dehydrogenase (NADP <sup>+</sup> ) (phosphorylating) (1.2.1.13)
101/05008	. . Quinate dehydrogenase (quinone) (1.1.5.8)	102/01015	. . Malonate-semialdehyde dehydrogenase (1.2.1.15)
101/09	. . with a copper protein as acceptor (1.1.9)	102/01016	. . Succinate-semialdehyde dehydrogenase [NAD(P) <sup>+</sup> ] (1.2.1.16)
101/09001	. . Alcohol dehydrogenase (azurin) (1.1.9.1)	102/01017	. . Glyoxylate dehydrogenase (acylating) (1.2.1.17)
101/98	. . with other, known, acceptors (1.1.98)	102/01018	. . Malonate-semialdehyde dehydrogenase (acetylating) (1.2.1.18)
101/98002	. . Glucose-6-phosphate dehydrogenase (coenzyme-F420) (1.1.98.2)	102/01019	. . Aminobutyraldehyde dehydrogenase (1.2.1.19)
101/98003	. . Decaprenylphospho-beta-D-ribofuranose 2-oxidase (1.1.98.3)	102/0102	. . Glutarate-semialdehyde dehydrogenase (1.2.1.20)
101/99	. . with other acceptors (1.1.99)	102/01021	. . Glycolaldehyde dehydrogenase (1.2.1.21)
101/99001	. . Choline dehydrogenase (1.1.99.1)	102/01022	. . Lactaldehyde dehydrogenase (1.2.1.22)
101/99002	. . 2-Hydroxyglutarate dehydrogenase (1.1.99.2)	102/01023	. . 2-Oxoaldehyde dehydrogenase (NAD <sup>+</sup> ) (1.2.1.23)
101/99003	. . Gluconate 2-dehydrogenase (acceptor) (1.1.99.3)	102/01024	. . Succinate-semialdehyde dehydrogenase (NAD <sup>+</sup> ) (1.2.1.24)
101/99004	. . Dehydrogluconate dehydrogenase (1.1.99.4)	102/01025	. . 2-Oxoisovalerate dehydrogenase (acylating) (1.2.1.25)
101/99006	. . D-2-Hydroxy-acid dehydrogenase (1.1.99.6)	102/01026	. . 2,5-Dioxovalerate dehydrogenase (1.2.1.26)
101/99007	. . Lactate--malate transhydrogenase (1.1.99.7)	102/01027	. . Methylmalonate-semialdehyde dehydrogenase (acylating) (1.2.1.27)
101/99008	. . Alcohol dehydrogenase (acceptor) (1.1.99.8) ( <a href="#">C12Y 101/02007</a> , <a href="#">C12Y 101/02008 take precedence</a> )	102/01028	. . Benzaldehyde dehydrogenase (NAD <sup>+</sup> ) (1.2.1.28)
101/99009	. . Pyridoxine 5-dehydrogenase (1.1.99.9)	102/01029	. . Aryl-aldehyde dehydrogenase (1.2.1.29)
101/9901	. . Glucose dehydrogenase (acceptor) (1.1.99.10)	102/0103	. . Aryl-aldehyde dehydrogenase (NADP <sup>+</sup> ) (1.2.1.30)
101/99011	. . Fructose 5-dehydrogenase (1.1.99.11)	102/01031	. . L-Aminoadipate-semialdehyde dehydrogenase (1.2.1.31), i.e. alpha-aminoacidate reductase
101/99012	. . Sorbose dehydrogenase (1.1.99.12)	102/01032	. . Aminomuconate-semialdehyde dehydrogenase (1.2.1.32)
101/99013	. . Glucoside 3-dehydrogenase (1.1.99.13)	102/01033	. . (R)-Dehydropantoate dehydrogenase (1.2.1.33)
101/99014	. . Glycolate dehydrogenase (1.1.99.14)	102/01036	. . Retinal dehydrogenase (1.2.1.36)
101/99018	. . Cellobiose oxidase (1.1.99.18)		
101/9902	. . Alkan-1-ol dehydrogenase (acceptor) (1.1.99.20)		
101/99021	. . D-Sorbitol dehydrogenase (acceptor) (1.1.99.21)		
101/99022	. . Glycerol dehydrogenase (acceptor) (1.1.99.22)		
101/99024	. . Hydroxyacid-oxoacid transhydrogenase (1.1.99.24)		
101/99026	. . 3-Hydroxycyclohexanone dehydrogenase (1.1.99.26)		
101/99027	. . (R)-Pantolactone dehydrogenase (flavin) (1.1.99.27)		
101/99028	. . Glucose-fructose oxidoreductase (1.1.99.28)		
101/99029	. . Pyranose dehydrogenase (acceptor) (1.1.99.29)		

102/01038	. . N-Acetyl-gamma-glutamyl-phosphate reductase (1.2.1.38)	102/01084	. . Alcohol-forming fatty acyl-CoA reductase (1.2.1.84)
102/01039	. . Phenylacetaldehyde dehydrogenase (1.2.1.39)	102/01085	. . 2-Hydroxymuconate-6-semialdehyde dehydrogenase (1.2.1.85)
102/01041	. . Glutamate-5-semialdehyde dehydrogenase (1.2.1.41)	102/01086	. . Geranial dehydrogenase (1.2.1.86)
102/01042	. . Hexadecanal dehydrogenase (acylating) (1.2.1.42), i.e. fatty acyl-CoA reductase	102/02	. with a cytochrome as acceptor (1.2.2)
102/01043	. . Formate dehydrogenase (NADP+) (1.2.1.43)	102/02001	. . Formate dehydrogenase (cytochrome) (1.2.2.1)
102/01044	. . Cinnamoyl-CoA reductase (1.2.1.44)	102/02003	. . Formate dehydrogenase (cytochrome c-553) (1.2.2.3)
102/01046	. . Formaldehyde dehydrogenase (1.2.1.46)	102/02004	. . Carbon-monoxide dehydrogenase (cytochrome b-561)(1.2.2.4)
102/01047	. . 4-Trimethylammoniumbutyraldehyde dehydrogenase (1.2.1.47)	102/03	. with oxygen as acceptor (1.2.3)
102/01048	. . Long-chain-aldehyde dehydrogenase (1.2.1.48)	102/03001	. . Aldehyde oxidase (1.2.3.1), i.e. retinal oxidase
102/01049	. . 2-Oxoaldehyde dehydrogenase (NADP+) (1.2.1.49)	102/03003	. . Pyruvate oxidase (1.2.3.3)
102/0105	. . Long-chain-fatty-acyl-CoA reductase (1.2.1.50)	102/03004	. . Oxalate oxidase (1.2.3.4)
102/01051	. . Pyruvate dehydrogenase (NADP+) (1.2.1.51)	102/03005	. . Glyoxylate oxidase (1.2.3.5)
102/01052	. . Oxoglutarate dehydrogenase (NADP+) (1.2.1.52)	102/03006	. . Pyruvate oxidase (CoA-acylating) (1.2.3.6)
102/01053	. . 4-Hydroxyphenylacetaldehyde dehydrogenase (1.2.1.53)	102/03007	. . Indole-3-acetaldehyde oxidase (1.2.3.7)
102/01054	. . Gamma-guanidinobutyraldehyde dehydrogenase (1.2.1.54)	102/03008	. . Pyridoxal oxidase (1.2.3.8)
102/01057	. . Butanal dehydrogenase (1.2.1.57)	102/03009	. . Aryl-aldehyde oxidase (1.2.3.9)
102/01058	. . Phenylglyoxylate dehydrogenase (acylating) (1.2.1.58)	102/03013	. . 4-Hydroxyphenylpyruvate oxidase (1.2.3.13)
102/01059	. . Glyceraldehyde-3-phosphate dehydrogenase (NAD(P)+)(phosphorylating) (1.2.1.59)	102/03014	. . Absciscic-aldehyde oxidase (1.2.3.14)
102/0106	. . 5-Carboxymethyl-2-hydroxymuconic-semialdehyde dehydrogenase (1.2.1.60)	102/04	. with a disulfide as acceptor (1.2.4)
102/01061	. . 4-Hydroxymuconic-semialdehyde dehydrogenase (1.2.1.61)	102/04001	. . Pyruvate dehydrogenase (acetyl-transferring) (1.2.4.1)
102/01062	. . 4-Formylbenzenesulfonate dehydrogenase (1.2.1.62)	102/04002	. . Oxoglutarate dehydrogenase (succinyl-transferring) (1.2.4.2), i.e. alpha-ketoglutarate dehydrogenase
102/01063	. . 6-Oxohexanoate dehydrogenase (1.2.1.63)	102/04004	. . 3-Methyl-2-oxobutanoate dehydrogenase (2-methylpropanoyl-transferring) (1.2.4.4), i.e. branched-chain-alpha-ketoacid dehydrogenase
102/01064	. . 4-Hydroxybenzaldehyde dehydrogenase (1.2.1.64)	102/05	. with a quinone or similar compound as acceptor (1.2.5)
102/01065	. . Salicylaldehyde dehydrogenase (1.2.1.65)	102/05001	. . Pyruvate dehydrogenase (quinone) (1.2.5.1)
102/01067	. . Vanillin dehydrogenase (1.2.1.67)	102/07	. with an iron-sulfur protein as acceptor (1.2.7)
102/01068	. . Coniferyl-aldehyde dehydrogenase (1.2.1.68)	102/07001	. . Pyruvate synthase (1.2.7.1), i.e. pyruvate ferredoxin oxidoreductase
102/01069	. . Fluoroacetaldehyde dehydrogenase (1.2.1.69)	102/07002	. . 2-Oxobutyrate synthase (1.2.7.2)
102/0107	. . Glutamyl-tRNA reductase (1.2.1.70)	102/07003	. . 2-Oxoglutarate synthase (1.2.7.3)
102/01071	. . Succinylglutamate-semialdehyde dehydrogenase (1.2.1.71)	102/07004	. . Carbon-monoxide dehydrogenase (ferredoxin) (1.2.7.4)
102/01072	. . Erythrose-4-phosphate dehydrogenase (1.2.1.72)	102/07005	. . Aldehyde ferredoxin oxidoreductase (1.2.7.5)
102/01073	. . Sulfoacetaldehyde dehydrogenase (1.2.1.73)	102/07006	. . Glyceraldehyde-3-phosphate dehydrogenase (ferredoxin) (1.2.7.6)
102/01074	. . Abieta-7,13-dien-18-al dehydrogenase (1.2.1.74)	102/07007	. . 3-Methyl-2-oxobutanoate dehydrogenase (ferredoxin) (1.2.7.7)
102/01075	. . Malonyl CoA reductase (malonate semialdehyde-forming)(1.2.1.75)	102/07008	. . Indolepyruvate ferredoxin oxidoreductase (1.2.7.8)
102/01076	. . Succinate-semialdehyde dehydrogenase (acylating) (1.2.1.76)	102/0701	. . Oxalate oxidoreductase (1.2.7.10)
102/01077	. . 3,4-Dehydrodipyl-CoA semialdehyde dehydrogenase (NADP+) (1.2.1.77)	102/99	. with other acceptors (1.2.99)
102/01078	. . 2-Formylbenzoate dehydrogenase (1.2.1.78)	102/99002	. . Carbon-monoxide dehydrogenase (acceptor) (1.2.99.2)
102/01079	. . Succinate-semialdehyde dehydrogenase (NADP+) (1.2.1.79)	102/99003	. . Aldehyde dehydrogenase (pyrroloquinoline-quinone) (1.2.99.3)
102/0108	. . Long-chain acyl-[acyl-carrier-protein] reductase (1.2.1.80)	102/99004	. . Formaldehyde dismutase (1.2.99.4)
102/01081	. . Sulfoacetaldehyde dehydrogenase (acylating) (1.2.1.81)	102/99005	. . Formylmethanofuran dehydrogenase (1.2.99.5)
102/01082	. . Beta-apo-4'-carotenal oxygenase (1.2.1.82)	102/99006	. . Carboxylate reductase (1.2.99.6)
102/01083	. . 3-Succinoylsemialdehyde-pyridine dehydrogenase (1.2.1.83)	102/99007	. . Aldehyde dehydrogenase (FAD-independent) (1.2.99.7)
		<b>103/00</b>	<b>Oxidoreductases acting on the CH-CH group of donors (1.3)</b>
		103/01	. with NAD+ or NADP+ as acceptor (1.3.1)

103/01001	. . Dihydropyrimidine dehydrogenase (NAD+) (1.3.1.1)	103/01049	. . Cis-3,4-dihydrophenanthrene-3,4-diol dehydrogenase (1.3.1.49)
103/01002	. . Dihydropyrimidine dehydrogenase (NADP+) (1.3.1.2)	103/01051	. . 2'-Hydroxydaidzein reductase (1.3.1.51)
103/01003	. . DELTA4-3-oxosteroid 5-beta-reductase (1.3.1.3)	103/01053	. . (3S,4R)-3,4-dihydroxycyclohexa-1,5-diene-1,4- dicarboxylate dehydrogenase (1.3.1.53)
103/01005	. . Cucurbitacin DELTA23-reductase (1.3.1.5)	103/01054	. . Precorrin-6A reductase (1.3.1.54)
103/01006	. . Fumarate reductase (NADH) (1.3.1.6)	103/01056	. . Cis-2,3-dihydrobiphenyl-2,3-diol dehydrogenase (1.3.1.56)
103/01007	. . Meso-tartrate dehydrogenase (1.3.1.7)	103/01057	. . Phloroglucinol reductase (1.3.1.57)
103/01008	. . Acyl-CoA dehydrogenase (NADP+) (1.3.1.8)	103/01058	. . 2,3-Dihydroxy-2,3-dihydro-p-cumate dehydrogenase (1.3.1.58)
103/01009	. . Enoyl-[acyl-carrier-protein] reductase (NADH) (1.3.1.9)	103/0106	. . Dibenzothiophene dihydrodiol dehydrogenase (1.3.1.60)
103/0101	. . Enoyl-[acyl-carrier-protein] reductase (NADPH, B-specific)(1.3.1.10)	103/01062	. . Pimeloyl-CoA dehydrogenase (1.3.1.62)
103/01011	. . 2-Coumarate reductase (1.3.1.11)	103/01063	. . 2,4-Dichlorobenzoyl-CoA reductase (1.3.1.63)
103/01012	. . Prephenate dehydrogenase (1.3.1.12)	103/01064	. . Phthalate 4,5-cis-dihydrodiol dehydrogenase (1.3.1.64)
103/01013	. . Prephenate dehydrogenase (NADP+) (1.3.1.13)	103/01065	. . 5,6-Dihydroxy-3-methyl-2-oxo-1,2,5,6- tetrahydroquinoline dehydrogenase (1.3.1.65)
103/01014	. . Dihydroorotate dehydrogenase (NAD+) (1.3.1.14)	103/01066	. . Cis-dihydroethylcatechol dehydrogenase (1.3.1.66)
103/01015	. . Dihydroorotate dehydrogenase (NADP+) (1.3.1.15)	103/01067	. . Cis-1,2-dihydroxy-4-methylcyclohexa-3,5- diene-1-carboxylate dehydrogenase (1.3.1.67)
103/01016	. . Beta-nitroacrylate reductase (1.3.1.16)	103/01068	. . 1,2-Dihydroxy-6-methylcyclohexa-3,5- dienecarboxylate dehydrogenase (1.3.1.68)
103/01017	. . 3-Methyleneoxindole reductase (1.3.1.17)	103/01069	. . Zeatin reductase (1.3.1.69)
103/01018	. . Kynurenate-7,8-dihydrodiol dehydrogenase (1.3.1.18)	103/0107	. . DELTA14-sterol reductase (1.3.1.70)
103/01019	. . Cis-1,2-dihydrobenzene-1,2-diol dehydrogenase (1.3.1.19)	103/01071	. . DELTA24 (24(1))-sterol reductase (1.3.1.71)
103/0102	. . Trans-1,2-dihydrobenzene-1,2-diol dehydrogenase (1.3.1.20)	103/01072	. . DELTA24-sterol reductase (1.3.1.72)
103/01021	. . 7-Dehydrocholesterol reductase (1.3.1.21)	103/01073	. . 1,2-Dihydrovomilenine reductase (1.3.1.73)
103/01022	. . 3-Oxo-5alpha-steroid 4-dehydrogenase (NADP+) (1.3.1.22), i.e. cortisone alpha-reductase	103/01074	. . 2-Alkenal reductase (1.3.1.74)
103/01024	. . Biliverdin reductase (1.3.1.24)	103/01075	. . Divinyl chlorophyllide a 8-vinyl-reductase (1.3.1.75)
103/01025	. . 1,6-Dihydroxycyclohexa-2,4-diene-1-carboxylate dehydrogenase (1.3.1.25)	103/01076	. . Precorrin-2 dehydrogenase (1.3.1.76)
103/01026	. . Dihydrodipicolinate reductase (1.3.1.26)	103/01077	. . Anthocyanidin reductase (1.3.1.77)
103/01027	. . 2-Hexadecenal reductase (1.3.1.27)	103/01078	. . Arogenate dehydrogenase (NADP+) (1.3.1.78)
103/01028	. . 2,3-Dihydro-2,3-dihydroxybenzoate dehydrogenase (1.3.1.28)	103/01079	. . Arogenate dehydrogenase (NAD(P)+)(1.3.1.79)
103/01029	. . Cis-1,2-dihydro-1,2-dihydroxynaphthalene dehydrogenase (1.3.1.29)	103/0108	. . Red chlorophyll catabolite reductase (1.3.1.80)
103/01031	. . 2-Enoate reductase (1.3.1.31)	103/01081	. . (+)-Pulegone reductase (1.3.1.81)
103/01032	. . Maleylacetate reductase (1.3.1.32)	103/01082	. . (-)-Isopiperitenone reductase (1.3.1.82)
103/01033	. . Protochlorophyllide reductase (1.3.1.33)	103/01083	. . Geranylgeranyl diphosphate reductase (1.3.1.83)
103/01034	. . 2,4-dienoyl-CoA reductase (NADPH) (1.3.1.34)	103/01084	. . Acrylyl-CoA reductase (NADPH) (1.3.1.84)
103/01035	. . Phosphatidylcholine desaturase (1.3.1.35)	103/01085	. . Crotonyl-CoA carboxylase/reductase (1.3.1.85)
103/01036	. . Geissoschizine dehydrogenase (1.3.1.36)	103/01086	. . Crotonyl-CoA reductase (1.3.1.86)
103/01037	. . Cis-2-enoyl-CoA reductase (NADPH) (1.3.1.37)	103/01087	. . 3-(Cis-5,6-dihydroxycyclohexa-1,3-dien-1- yl)propanoate dehydrogenase (1.3.1.87)
103/01038	. . Trans-2-enoyl-CoA reductase (NADPH) (1.3.1.38)	103/01088	. . tRNA-dihydrouridine16/17 synthase (NAD(P)+) (1.3.1.88)
103/01039	. . Enoyl-[acyl-carrier-protein] reductase (NADPH, A-specific)(1.3.1.39)	103/01089	. . tRNA-dihydrouridine47 synthase (NAD(P)+) (1.3.1.89)
103/0104	. . 2-Hydroxy-6-oxo-6-phenylhexa-2,4-dienoate reductase (1.3.1.40)	103/0109	. . tRNA-dihydrouridine20a/20b synthase (NAD(P)+)(1.3.1.90)
103/01041	. . Xanthommatin reductase (1.3.1.41)	103/01091	. . tRNA-dihydrouridine20 synthase (NAD(P)+) (1.3.1.91)
103/01042	. . 12-Oxophytodienoate reductase (1.3.1.42), i.e. morphinone-reductase	103/01092	. . Artemisinic aldehyde DELTA11(13)-reductase (1.3.1.92)
103/01043	. . Arogenate dehydrogenase (1.3.1.43)	103/01093	. . Very-long-chain enoyl-CoA reductase (1.3.1.93)
103/01044	. . Trans-2-enoyl-CoA reductase (NAD+) (1.3.1.44)	103/01094	. . Polyprenol reductase (1.3.1.94)
103/01045	. . 2'-Hydroxyisoflavone reductase (1.3.1.45)	103/01095	. . Acrylyl-CoA reductase (NADH) (1.3.1.95)
103/01046	. . Biochanin-A reductase (1.3.1.46)	103/01096	. . Botryococcus squalene synthase (1.3.1.96)
103/01047	. . Alpha-santonin 1,2-reductase (1.3.1.47)	103/01097	. . Botryococcene synthase (1.3.1.97)
103/01048	. . 15-Oxoprostaglandin 13-oxidase (1.3.1.48)	103/02	. . with a cytochrome as acceptor (1.3.2)
		103/02003	. . L-Galactonolactone dehydrogenase (1.3.2.3)



103/03	. with oxygen as acceptor (1.3.3)	103/99008	. . 2-Furoyl-CoA dehydrogenase (1.3.99.8)
103/03003	. . Coproporphyrinogen oxidase (1.3.3.3)	103/99012	. . 2-Methylacyl-CoA dehydrogenase (1.3.99.12)
103/03004	. . Protoporphyrinogen oxidase (1.3.3.4)	103/99014	. . Cyclohexanone dehydrogenase (1.3.99.14)
103/03005	. . Bilirubin oxidase (1.3.3.5)	103/99016	. . Isoquinoline 1-oxidoreductase (1.3.99.16)
103/03006	. . Acyl-CoA oxidase (1.3.3.6)	103/99017	. . Quinoline 2-oxidoreductase (1.3.99.17)
103/03007	. . Dihydrouracil oxidase (1.3.3.7)	103/99018	. . Quinaldate 4-oxidoreductase (1.3.99.18)
103/03008	. . Tetrahydroberberine oxidase (1.3.3.8)	103/99019	. . Quinoline-4-carboxylate 2-oxidoreductase (1.3.99.19)
103/03009	. . Secologanin synthase (1.3.3.9)	103/99022	. . Coproporphyrinogen dehydrogenase (1.3.99.22)
103/0301	. . Tryptophan alpha,beta-oxidase (1.3.3.10)	103/99023	. . All-trans-retinol 13,14-reductase (1.3.99.23)
103/03011	. . Pyrroloquinoline-quinone synthase (1.3.3.11)	103/99024	. . 2-Amino-4-deoxychorismate dehydrogenase (1.3.99.24)
103/03012	. . L-Galactonolactone oxidase (1.3.3.12)	103/99025	. . Carvone reductase (1.3.99.25)
103/05	. with a quinone or related compound as acceptor (1.3.5)	103/99026	. . All-trans-zeta-carotene desaturase (1.3.99.26)
103/05001	. . Succinate dehydrogenase (ubiquinone) (1.3.5.1)	103/99027	. . 1-Hydroxycarotenoid 3,4-desaturase (1.3.99.27)
103/05002	. . Dihydroorotate dehydrogenase (1.3.5.2)	103/99028	. . Phytoene desaturase (neurosporene-forming) (1.3.99.28)
103/05003	. . Protoporphyrinogen IX dehydrogenase (menaquinone) (1.3.5.3)	103/99029	. . Phytoene desaturase (zeta-carotene-forming) (1.3.99.29)
103/05004	. . Fumarate reductase (menaquinone) (1.3.5.4)	103/9903	. . Phytoene desaturase (3,4-didehydrolycopene-forming) (1.3.99.30)
103/05005	. . 15-Cis-phytoene desaturase (1.3.5.5)	103/99031	. . Phytoene desaturase (lycopene-forming) (1.3.99.31)
103/05006	. . 9,9'-Di-cis-zeta-carotene desaturase (1.3.5.6)	103/99032	. . Glutaryl-CoA dehydrogenase (non-decarboxylating) (1.3.99.32)
103/07	. with an iron-sulfur protein as acceptor (1.3.7)		
103/07001	. . 6-Hydroxynicotinate reductase (1.3.7.1)	<b>104/00</b>	<b>Oxidoreductases acting on the CH-NH2 group of donors (1.4)</b>
103/07002	. . 15,16-Dihydrobiliverdin:ferredoxin oxidoreductase (1.3.7.2)	104/01	. with NAD+ or NADP+ as acceptor (1.4.1)
103/07003	. . Phycoerythrobilin:ferredoxin oxidoreductase (1.3.7.3)	104/01001	. . Alanine dehydrogenase (1.4.1.1)
103/07004	. . Phytochromobilin:ferredoxin oxidoreductase (1.3.7.4)	104/01002	. . Glutamate dehydrogenase (1.4.1.2)
103/07005	. . Phycocyanobilin:ferredoxin oxidoreductase (1.3.7.5)	104/01003	. . Glutamate dehydrogenase (NAD(P)+)(1.4.1.3)
103/07006	. . Phycoerythrobilin synthase (1.3.7.6)	104/01004	. . Glutamate dehydrogenase (NADP+) (1.4.1.4)
103/07007	. . Ferredoxin:protochlorophyllide reductase (ATP-dependent) (1.3.7.7)	104/01005	. . L-Amino-acid dehydrogenase (1.4.1.5)
103/07008	. . Benzoyl-CoA reductase (1.3.7.8)	104/01007	. . Serine 2-dehydrogenase (1.4.1.7)
103/07009	. . 4-Hydroxybenzoyl-CoA reductase (1.3.7.9)	104/01008	. . Valine dehydrogenase (NADP+) (1.4.1.8)
103/0701	. . Pentalenolactone synthase (1.3.7.10)	104/01009	. . Leucine dehydrogenase (1.4.1.9)
103/08	. with flavin as acceptor (1.3.8)	104/0101	. . Glycine dehydrogenase (1.4.1.10)
103/08001	. . Butyryl-CoA dehydrogenase (1.3.8.1), i.e. short chain acyl-CoA dehydrogenase	104/01011	. . L-Erythro-3,5-diaminohexanoate dehydrogenase (1.4.1.11)
103/08002	. . 4,4'-Diapophytoene desaturase (1.3.8.2)	104/01012	. . 2,4-Diaminopentanoate dehydrogenase (1.4.1.12)
103/08003	. . (R)-Benzylsuccinyl-CoA dehydrogenase (1.3.8.3)	104/01013	. . Glutamate synthase (NADPH) (1.4.1.13)
103/08004	. . Isovaleryl-CoA dehydrogenase (1.3.8.4)	104/01014	. . Glutamate synthase (NADH) (1.4.1.14)
103/08005	. . 2-Methyl-branched-chain-enoil-CoA reductase (1.3.8.5)	104/01015	. . Lysine dehydrogenase (1.4.1.15)
103/08006	. . Glutaryl-CoA dehydrogenase (1.3.8.6)	104/01016	. . Diaminopimelate dehydrogenase (1.4.1.16)
103/08007	. . Medium-chain acyl-CoA dehydrogenase (1.3.8.7)	104/01017	. . N-Methylalanine dehydrogenase (1.4.1.17)
103/08008	. . Long-chain acyl-CoA dehydrogenase (1.3.8.8)	104/01018	. . Lysine 6-dehydrogenase (1.4.1.18)
103/08009	. . Very-long-chain acyl-CoA dehydrogenase (1.3.8.9)	104/01019	. . Tryptophan dehydrogenase (1.4.1.19)
103/98	. with other, known, acceptors (1.3.98)	104/0102	. . Phenylalanine dehydrogenase (1.4.1.20)
103/98001	. . Dihydroorotate oxidase (fumarate) (1.3.98.1)	104/01021	. . Aspartate dehydrogenase (1.4.1.21)
103/99	. with other acceptors (1.3.99)	104/01023	. . Valine dehydrogenase (NAD+) (1.4.1.23)
103/99001	. . Succinate dehydrogenase (1.3.99.1)	104/01024	. . 3-Dehydroquininate synthase II (1.4.1.24)
103/99002	. . Butyryl-CoA dehydrogenase (1.3.99.2), i.e. short chain acyl-CoA dehydrogenase	104/02	. with a cytochrome as acceptor (1.4.2)
103/99003	. . Acyl-CoA dehydrogenase (1.3.99.3) ( <a href="#">C12Y 103/08007</a> , <a href="#">C12Y 103/08008</a> and <a href="#">C12Y 103/08009</a> take precedence)	104/02001	. . Glycine dehydrogenase (cytochrome) (1.4.2.1)
103/99004	. . 3-Oxosteroid 1-dehydrogenase (1.3.99.4)	104/03	. with oxygen as acceptor (1.4.3)
103/99005	. . 3-Oxo-5alpha-steroid 4-dehydrogenase (acceptor) (1.3.99.5), i.e. steroid-5alpha-reductase	104/03001	. . D-Aspartate oxidase (1.4.3.1)
103/99006	. . 3-Oxo-5-beta-steroid 4-dehydrogenase (1.3.99.6)	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-Hydroxypseudoxynicotine 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 . . Hydrogensulfite 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+ or NADP+ 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+-transporting) (1.10.3.10)
- 110/03011 . . Ubiquinol oxidase (1.10.3.11)
- 110/03012 . . Menaquinol oxidase (H+-transporting) (1.10.3.12)
- 110/09 . . with a copper protein as acceptor (1.10.9)
- 110/09001 . . Plastocyanin-plastocyanin reductase (1.10.9.1)
- 110/99 . . with other acceptors (1.10.99)
- 110/99002 . . Ribosylldihydrocinchonamide 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 F2-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. indolamine 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-secoandrost-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 (asparaginy) 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 . . Clavamate 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)	114/13055	. . Protopine 6-monooxygenase (1.14.13.55)
114/13007	. . Phenol 2-monooxygenase (1.14.13.7)	114/13056	. . Dihydrosanguinarine 10-monooxygenase (1.14.13.56)
114/13008	. . Flavin-containing monooxygenase (1.14.13.8), i.e. dimethylaniline-monooxygenase	114/13057	. . Dihydrochelirubine 12-monooxygenase (1.14.13.57)
114/13009	. . Kynurenine 3-monooxygenase (1.14.13.9)	114/13058	. . Benzoyl-CoA 3-monooxygenase (1.14.13.58)
114/1301	. . 2,6-Dihydroxypyridine 3-monooxygenase (1.14.13.10)	114/13059	. . L-Lysine N6-monooxygenase (NADPH) (1.14.13.59)
114/13011	. . Trans-cinnamate 4-monooxygenase (1.14.13.11)	114/1306	. . 27-Hydroxycholesterol 7-alpha-monooxygenase (1.14.13.60)
114/13012	. . Benzoate 4-monooxygenase (1.14.13.12)	114/13061	. . 2-Hydroxyquinoline 8-monooxygenase (1.14.13.61)
114/13013	. . Calcdiol 1-monooxygenase (1.14.13.13), i.e. 25-hydroxyvitamin D-1-alpha-hydroxylase	114/13062	. . 4-Hydroxyquinoline 3-monooxygenase (1.14.13.62)
114/13014	. . Trans-cinnamate 2-monooxygenase (1.14.13.14)	114/13063	. . 3-Hydroxyphenylacetate 6-hydroxylase (1.14.13.63)
114/13015	. . Cholestanetriol 26-monooxygenase (1.14.13.15)	114/13064	. . 4-Hydroxybenzoate 1-hydroxylase (1.14.13.64)
114/13016	. . Cyclopentanone monooxygenase (1.14.13.16)	114/13066	. . 2-Hydroxycyclohexanone 2-monooxygenase (1.14.13.66)
114/13017	. . Cholesterol 7-alpha-monooxygenase (1.14.13.17)	114/13067	. . Quinine 3-monooxygenase (1.14.13.67)
114/13018	. . 4-Hydroxyphenylacetate 1-monooxygenase (1.14.13.18)	114/13068	. . 4-Hydroxyphenylacetaldehyde oxime monooxygenase (1.14.13.68)
114/13019	. . Taxifolin 8-monooxygenase (1.14.13.19)	114/13069	. . Alkene monooxygenase (1.14.13.69)
114/1302	. . 2,4-Dichlorophenol 6-monooxygenase (1.14.13.20)	114/1307	. . Sterol 14-demethylase (1.14.13.70)
114/13021	. . Flavonoid 3'-monooxygenase (1.14.13.21)	114/13071	. . N-Methylcoclaurine 3'-monooxygenase (1.14.13.71)
114/13022	. . Cyclohexanone monooxygenase (1.14.13.22)	114/13072	. . Methylsterol monooxygenase (1.14.13.72)
114/13023	. . 3-Hydroxybenzoate 4-monooxygenase (1.14.13.23)	114/13073	. . Tabersonine 16-hydroxylase (1.14.13.73)
114/13024	. . 3-Hydroxybenzoate 6-monooxygenase (1.14.13.24)	114/13074	. . 7-Deoxyloganin 7-hydroxylase (1.14.13.74)
114/13025	. . Methane monooxygenase (1.14.13.25)	114/13075	. . Vinorine hydroxylase (1.14.13.75)
114/13026	. . Phosphatidylcholine 12-monooxygenase (1.14.13.26)	114/13076	. . Taxane 10-beta-hydroxylase (1.14.13.76)
114/13027	. . 4-Aminobenzoate 1-monooxygenase (1.14.13.27)	114/13077	. . Taxane 13-alpha-hydroxylase (1.14.13.77)
114/13028	. . 3,9-Dihydroxypterocarpan 6A-monooxygenase (1.14.13.28)	114/13078	. . Ent-kaurene oxidase (1.14.13.78)
114/13029	. . 4-Nitrophenol 2-monooxygenase (1.14.13.29)	114/13079	. . Ent-kaurenoic acid oxidase (1.14.13.79)
114/1303	. . Leukotriene-B4 20-monooxygenase (1.14.13.30), i.e. leukotriene-B4-omega-hydroxylase	114/1308	. . (R)-Limonene 6-monooxygenase (1.14.13.80)
114/13031	. . 2-Nitrophenol 2-monooxygenase (1.14.13.31)	114/13081	. . Magnesium-protoporphyrin IX monomethyl ester (oxidative) cyclase (1.14.13.81)
114/13032	. . Albendazole monooxygenase (1.14.13.32)	114/13082	. . Vanillate monooxygenase (1.14.13.82)
114/13033	. . 4-Hydroxybenzoate 3-monooxygenase (NAD(P)H)(1.14.13.33)	114/13083	. . Precorrin-3B synthase (1.14.13.83)
114/13034	. . Leukotriene-E4 20-monooxygenase (1.14.13.34)	114/13084	. . 4-Hydroxyacetophenone monooxygenase (1.14.13.84)
114/13035	. . Anthranilate 3-monooxygenase (deaminating) (1.14.13.35)	114/13085	. . Glyceollin synthase (1.14.13.85)
114/13036	. . 5-O-(4-Coumaroyl)-D-quinic acid 3'-monooxygenase (1.14.13.36)	114/13086	. . 2-Hydroxyisoflavanone synthase (1.14.13.86)
114/13037	. . Methyltetrahydroprotoberberine 14-monooxygenase (1.14.13.37)	114/13087	. . Licodione synthase (1.14.13.87)
114/13038	. . Anhydrotetracycline monooxygenase (1.14.13.38)	114/13088	. . Flavonoid 3',5'-hydroxylase (1.14.13.88)
114/13039	. . Nitric-oxide synthase (NADPH dependent) (1.14.13.39)	114/13089	. . Isoflavone 2'-hydroxylase (1.14.13.89)
114/1304	. . Anthraniloyl-CoA monooxygenase (1.14.13.40)	114/1309	. . Zeaxanthin epoxidase (1.14.13.90)
114/13041	. . Tyrosine N-monooxygenase (1.14.13.41)	114/13091	. . Deoxysarpagine hydroxylase (1.14.13.91)
114/13043	. . Questin monooxygenase (1.14.13.43)	114/13092	. . Phenylacetone monooxygenase (1.14.13.92)
114/13044	. . 2-Hydroxybiphenyl 3-monooxygenase (1.14.13.44)	114/13093	. . (+)-Abscissic acid 8'-hydroxylase (1.14.13.93)
114/13046	. . (-)-Menthol monooxygenase (1.14.13.46)	114/13094	. . Lithocholate 6-beta-hydroxylase (1.14.13.94)
114/13047	. . (S)-Limonene 3-monooxygenase (1.14.13.47)	114/13095	. . 7-Alpha-hydroxycholest-4-en-3-one 12-alpha-hydroxylase (1.14.13.95)
114/13048	. . (S)-Limonene 6-monooxygenase (1.14.13.48)	114/13096	. . 5-Beta-cholestane-3-alpha,7-alpha-diol 12-alpha-hydroxylase (1.14.13.96)
114/13049	. . (S)-Limonene 7-monooxygenase (1.14.13.49)	114/13097	. . Taurochenodeoxycholate 6-alpha-hydroxylase (1.14.13.97)
114/1305	. . Pentachlorophenol monooxygenase (1.14.13.50)	114/13098	. . Cholesterol 24-hydroxylase (1.14.13.98)
114/13051	. . 6-Oxocineole dehydrogenase (1.14.13.51)	114/13099	. . 24-Hydroxycholesterol 7-alpha-hydroxylase (1.14.13.99)
114/13052	. . Isoflavone 3'-hydroxylase (1.14.13.52)	114/131	. . 25-Hydroxycholesterol 7-alpha-hydroxylase (1.14.13.100)
114/13053	. . 4'-Methoxyisoflavone 2'-hydroxylase (1.14.13.53)	114/13101	. . Senecionine N-oxygenase (1.14.13.101)
114/13054	. . Ketosteroid monooxygenase (1.14.13.54)		

- 114/13102 . . Psoralen synthase (1.14.13.102)
- 114/13103 . . 8-Dimethylallylnaringenin 2'-hydroxylase (1.14.13.103)
- 114/13104 . . (+)-Menthofuran synthase (1.14.13.104)
- 114/13105 . . Monocyclic monoterpene ketone monooxygenase (1.14.13.105)
- 114/13106 . . Epi-isozizaene 5-monooxygenase (1.14.13.106)
- 114/13107 . . Limonene 1,2-monooxygenase (1.14.13.107)
- 114/13108 . . Abieta-7,13-diene hydroxylase (1.14.13.108)
- 114/13109 . . Abieta-7,13-dien-18-ol hydroxylase (1.14.13.109)
- 114/1311 . . Geranylgeraniol 18-hydroxylase (1.14.13.110)
- 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 . . Geranylhdroquinone 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 . . Premnaspirodien 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 P450sc
- 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-acetylneuraminate 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 . . Berbamunine 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 . . Biflaviolin 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 . . Plasmanylethanolamine 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-dehydrosuberyl-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 . . Methylarsenate 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-cyclopiazonate 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)	201/01047	. . Indolepyruvate C-methyltransferase (2.1.1.47)
201/01006	. . Catechol O-methyltransferase (2.1.1.6)	201/01048	. . rRNA (adenine-N6-)-methyltransferase (2.1.1.48) ( <a href="#">C12Y 201/01181</a> - <a href="#">C12Y 201/01184</a> take precedence)
201/01007	. . Nicotinate N-methyltransferase (2.1.1.7)	201/01049	. . Amine N-methyltransferase (2.1.1.49)
201/01008	. . Histamine N-methyltransferase (2.1.1.8)	201/0105	. . Loganate O-methyltransferase (2.1.1.50)
201/01009	. . Thiol S-methyltransferase (2.1.1.9)	201/01051	. . rRNA (guanine-N1-)-methyltransferase (2.1.1.51) ( <a href="#">C12Y 201/01187</a> , <a href="#">C12Y 201/01188</a> take precedence)
201/0101	. . Homocysteine S-methyltransferase (2.1.1.10)	201/01052	. . rRNA (guanine-N2-)-methyltransferase (2.1.1.52) ( <a href="#">C12Y 201/01171</a> - <a href="#">C12Y 201/01174</a> take precedence)
201/01011	. . Magnesium protoporphyrin IX methyltransferase (2.1.1.11)	201/01053	. . Putrescine N-methyltransferase (2.1.1.53)
201/01012	. . Methionine S-methyltransferase (2.1.1.12)	201/01054	. . Deoxycytidylate C-methyltransferase (2.1.1.54)
201/01013	. . Methionine synthase (2.1.1.13)	201/01055	. . tRNA (adenine-N6-)-methyltransferase (2.1.1.55)
201/01014	. . 5-Methyltetrahydropteroyltriglutamate--homocysteine S-methyltransferase (2.1.1.14)	201/01056	. . mRNA (guanine-N7-)-methyltransferase (2.1.1.56)
201/01015	. . Fatty-acid O-methyltransferase (2.1.1.15)	201/01057	. . mRNA (nucleoside-2'-O-)-methyltransferase (2.1.1.57)
201/01016	. . Methylene-fatty-acyl-phospholipid synthase (2.1.1.16)	201/01059	. . [Cytochrome c]-lysine N-methyltransferase (2.1.1.59)
201/01017	. . Phosphatidylethanolamine N-methyltransferase (2.1.1.17)	201/0106	. . Calmodulin-lysine N-methyltransferase (2.1.1.60)
201/01018	. . Polysaccharide O-methyltransferase (2.1.1.18)	201/01061	. . tRNA (5-methylaminomethyl-2-thiouridylate)-methyltransferase (2.1.1.61)
201/01019	. . Trimethylsulfonium--tetrahydrofolate N-methyltransferase (2.1.1.19)	201/01062	. . mRNA (2'-O-methyladenosine-N6-)-methyltransferase (2.1.1.62)
201/0102	. . Glycine N-methyltransferase (2.1.1.20)	201/01063	. . Methylated-DNA-[protein]-cysteine S-methyltransferase (2.1.1.63), i.e. O6-methylguanine-DNA methyltransferase
201/01021	. . Methylamine--glutamate N-methyltransferase (2.1.1.21)	201/01064	. . 3-Demethylubiquinol 3-O-methyltransferase (2.1.1.64)
201/01022	. . Carnosine N-methyltransferase (2.1.1.22)	201/01065	. . Licodione 2'-O-methyltransferase (2.1.1.65)
201/01023	. . Protein-arginine N-methyltransferase (2.1.1.23) ( <a href="#">C12Y 201/01124</a> - <a href="#">C12Y 201/01126</a> take precedence)	201/01066	. . rRNA (adenosine-2'-O-)-methyltransferase (2.1.1.66)
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)	201/01067	. . Thiopurine S-methyltransferase (2.1.1.67)
201/01025	. . Phenol O-methyltransferase (2.1.1.25)	201/01068	. . Caffeaate O-methyltransferase (2.1.1.68)
201/01026	. . Iodophenol O-methyltransferase (2.1.1.26)	201/01069	. . 5-Hydroxyfuranocoumarin 5-O-methyltransferase (2.1.1.69)
201/01027	. . Tyramine N-methyltransferase (2.1.1.27)	201/0107	. . 8-Hydroxyfuranocoumarin 8-O-methyltransferase (2.1.1.70)
201/01028	. . Phenylethanolamine N-methyltransferase (2.1.1.28)	201/01071	. . Phosphatidyl-N-methylethanolamine N-methyltransferase (2.1.1.71)
201/01029	. . tRNA (cytosine-5-)-methyltransferase (2.1.1.29) ( <a href="#">C12Y 201/01202</a> - <a href="#">C12Y 201/01204</a> take precedence)	201/01072	. . Site-specific DNA-methyltransferase (adenine-specific) (2.1.1.72)
201/01031	. . tRNA (guanine-N1-)-methyltransferase (2.1.1.31) ( <a href="#">C12Y 201/01221</a> , <a href="#">C12Y 201/01228</a> take precedence)	201/01074	. . Methylene-tetrahydrofolate--tRNA-(uracil54-C5)-methyltransferase (FADH2-oxidizing) (2.1.1.74)
201/01032	. . tRNA (guanine-N2-)-methyltransferase (2.1.1.32) ( <a href="#">C12Y 201/01213</a> - <a href="#">C12Y 201/01216</a> take precedence)	201/01075	. . Apigenin 4'-O-methyltransferase (2.1.1.75)
201/01033	. . tRNA (guanine-N7-)-methyltransferase (2.1.1.33)	201/01076	. . Quercetin 3-O-methyltransferase (2.1.1.76)
201/01034	. . tRNA (guanosine18-2'-O)-methyltransferase (2.1.1.34)	201/01077	. . Protein-L-isoaspartate(D-aspartate) O-methyltransferase (2.1.1.77)
201/01035	. . tRNA (uracil-5-)-methyltransferase (2.1.1.35)	201/01078	. . Isoorientin 3'-O-methyltransferase (2.1.1.78)
201/01036	. . tRNA (adenine-N1-)-methyltransferase (2.1.1.36) ( <a href="#">C12Y 201/01217</a> - <a href="#">C12Y 201/0122</a> take precedence)	201/01079	. . Cyclopropane-fatty-acyl-phospholipid synthase (2.1.1.79)
201/01037	. . DNA (cytosine-5-)-methyltransferase (2.1.1.37)	201/0108	. . Protein-glutamate O-methyltransferase (2.1.1.80)
201/01038	. . O-Demethylpuromycin O-methyltransferase (2.1.1.38)	201/01082	. . 3-Methylquercetin 7-O-methyltransferase (2.1.1.82)
201/01039	. . Inositol 3-methyltransferase (2.1.1.39)	201/01083	. . 3,7-Dimethylquercetin 4'-O-methyltransferase (2.1.1.83)
201/0104	. . Inositol 1-methyltransferase (2.1.1.40)	201/01084	. . Methylquercetagenin 6-O-methyltransferase (2.1.1.84)
201/01041	. . Sterol 24-C-methyltransferase (2.1.1.41)	201/01085	. . Protein-histidine N-methyltransferase (2.1.1.85)
201/01042	. . Flavone 3'-O-methyltransferase (2.1.1.42)	201/01086	. . Tetrahydromethanopterin S-methyltransferase (2.1.1.86)
201/01043	. . Histone-lysine N-methyltransferase (2.1.1.43)		
201/01044	. . Dimethylhistidine N-methyltransferase (2.1.1.44)		
201/01045	. . Thymidylate synthase (2.1.1.45)		
201/01046	. . Isoflavone 4'-O-methyltransferase (2.1.1.46)		

201/01087	. .	Pyridine N-methyltransferase (2.1.1.87)	201/01127	. .	[Ribulose-bisphosphate carboxylase]-lysine N-methyltransferase (2.1.1.127)
201/01088	. .	8-Hydroxyquercetin 8-O-methyltransferase (2.1.1.88)	201/01128	. .	(RS)-Norcoclaurine 6-O-methyltransferase (2.1.1.128)
201/01089	. .	Tetrahydrocolumbamine 2-O-methyltransferase (2.1.1.89)	201/01129	. .	Inositol 4-methyltransferase (2.1.1.129)
201/0109	. .	Methanol—corrinoide protein Co-methyltransferase (2.1.1.90)	201/0113	. .	Precorrin-2 C20-methyltransferase (2.1.1.130)
201/01091	. .	Isobutyraldoxime O-methyltransferase (2.1.1.91)	201/01131	. .	Precorrin-3B C17-methyltransferase (2.1.1.131)
201/01094	. .	Tabersonine 16-O-methyltransferase (2.1.1.94)	201/01132	. .	Precorrin-6Y C5,15-methyltransferase (decarboxylating) (2.1.1.132)
201/01095	. .	Tocopherol O-methyltransferase (2.1.1.95)	201/01133	. .	Precorrin-4 C11-methyltransferase (2.1.1.133)
201/01096	. .	Thioether S-methyltransferase (2.1.1.96)	201/01136	. .	Chlorophenol O-methyltransferase (2.1.1.136)
201/01097	. .	3-Hydroxyanthranilate 4-C-methyltransferase (2.1.1.97)	201/01137	. .	Arsenite methyltransferase (2.1.1.137)
201/01098	. .	Diphthine synthase (2.1.1.98)	201/01139	. .	3'-Demethylstaurosporine O-methyltransferase (2.1.1.139)
201/01099	. .	3-Hydroxy-16-methoxy-2,3-dihydrotabersonine N-methyltransferase (2.1.1.99)	201/0114	. .	(S)-Coclaurine-N-methyltransferase (2.1.1.140)
201/011	. .	Protein-S-isoprenylcysteine O-methyltransferase (2.1.1.100)	201/01141	. .	Jasmonate O-methyltransferase (2.1.1.141)
201/01101	. .	Macrocin O-methyltransferase (2.1.1.101)	201/01142	. .	Cycloartenol 24-C-methyltransferase (2.1.1.142), i.e. sterol C24-methyltransferase
201/01102	. .	Demethylmacrocin O-methyltransferase (2.1.1.102)	201/01143	. .	24-Methylenesterol C-methyltransferase (2.1.1.143), i.e. DELTA24-sterol methyltransferase
201/01103	. .	Phosphoethanolamine N-methyltransferase (2.1.1.103)	201/01144	. .	Trans-aconitate 2-methyltransferase (2.1.1.144)
201/01104	. .	Caffeoyl-CoA O-methyltransferase (2.1.1.104)	201/01145	. .	Trans-aconitate 3-methyltransferase (2.1.1.145)
201/01105	. .	N-Benzoyl-4-hydroxyanthranilate 4-O-methyltransferase (2.1.1.105)	201/01146	. .	(Iso)eugenol O-methyltransferase (2.1.1.146)
201/01106	. .	Tryptophan 2-C-methyltransferase (2.1.1.106)	201/01147	. .	Corydaline synthase (2.1.1.147)
201/01107	. .	Uroporphyrinogen-III C-methyltransferase (2.1.1.107)	201/01148	. .	Thymidylate synthase (FAD) (2.1.1.148)
201/01108	. .	6-Hydroxymellein O-methyltransferase (2.1.1.108)	201/01149	. .	Myricetin O-methyltransferase (2.1.1.149)
201/01109	. .	Demethylsterigmatocystin 6-O-methyltransferase (2.1.1.109)	201/0115	. .	Isoflavone 7-O-methyltransferase (2.1.1.150)
201/0111	. .	Sterigmatocystin 8-O-methyltransferase (2.1.1.110)	201/01151	. .	Cobalt-factor II C20-methyltransferase (2.1.1.151)
201/01111	. .	Anthranilate N-methyltransferase (2.1.1.111)	201/01152	. .	Precorrin-6A synthase (deacetylating) (2.1.1.152)
201/01112	. .	Glucuronoxylan 4-O-methyltransferase (2.1.1.112)	201/01153	. .	Vitexin 2''-O-rhamnoside 7-O-methyltransferase (2.1.1.153)
201/01113	. .	Site-specific DNA-methyltransferase (cytosine-N4-specific) (2.1.1.113)	201/01154	. .	Isoliquiritigenin 2'-O-methyltransferase (2.1.1.154)
201/01114	. .	Polyprenyldihydroxybenzoate methyltransferase (2.1.1.114)	201/01155	. .	Kaempferol 4'-O-methyltransferase (2.1.1.155)
201/01115	. .	(RS)-1-Benzyl-1,2,3,4-tetrahydroisoquinoline N-methyltransferase (2.1.1.115)	201/01156	. .	Glycine/sarcosine N-methyltransferase (2.1.1.156)
201/01116	. .	3'-Hydroxy-N-methyl-(S)-coclaurine 4'-O-methyltransferase (2.1.1.116)	201/01157	. .	Sarcosine/dimethylglycine N-methyltransferase (2.1.1.157)
201/01117	. .	(S)-Scoulerine 9-O-methyltransferase (2.1.1.117)	201/01158	. .	7-Methylxanthosine synthase (2.1.1.158)
201/01118	. .	Columbamine O-methyltransferase (2.1.1.118)	201/01159	. .	Theobromine synthase (2.1.1.159)
201/01119	. .	10-Hydroxydihydrosanguinarine 10-O-methyltransferase (2.1.1.119)	201/0116	. .	Caffeine synthase (2.1.1.160)
201/0112	. .	12-Hydroxydihydrochelirubine 12-O-methyltransferase (2.1.1.120)	201/01161	. .	Dimethylglycine N-methyltransferase (2.1.1.161)
201/01121	. .	6-O-Methylnorlaudanosoline 5'-O-methyltransferase (2.1.1.121)	201/01162	. .	Glycine/sarcosine/dimethylglycine N-methyltransferase (2.1.1.162)
201/01122	. .	(S)-Tetrahydroprotoberberine N-methyltransferase (2.1.1.122)	201/01163	. .	Demethylmenaquinone methyltransferase (2.1.1.163)
201/01123	. .	[Cytochrome c]-methionine S-methyltransferase (2.1.1.123)	201/01164	. .	Demethylrebeccamycin-D-glucose O-methyltransferase (2.1.1.164)
201/01124	. .	[Cytochrome c]-arginine N-methyltransferase (2.1.1.124)	201/01165	. .	Methyl halide transferase (2.1.1.165)
201/01125	. .	Histone-arginine N-methyltransferase (2.1.1.125)	201/01166	. .	23S rRNA (uridine2552-2'-O-)-methyltransferase (2.1.1.166)
201/01126	. .	[Myelin basic protein]-arginine N-methyltransferase (2.1.1.126)	201/01167	. .	27S pre-rRNA (guanosine2922-2'-O-)-methyltransferase (2.1.1.167)
			201/01168	. .	21S rRNA (uridine2791-2'-O-)-methyltransferase (2.1.1.168)
			201/01169	. .	Tricetin 3',4',5'-O-trimethyltransferase (2.1.1.169)
			201/0117	. .	16S rRNA (guanine527-N7)-methyltransferase (2.1.1.170)
			201/01171	. .	16S rRNA (guanine966-N2)-methyltransferase (2.1.1.171)



201/01172	. . 16S rRNA (guanine1207-N2)-methyltransferase (2.1.1.172)	201/01204	. . tRNA (cytosine38-C5)-methyltransferase (2.1.1.204)
201/01173	. . 23S rRNA (guanine2445-N2)-methyltransferase (2.1.1.173)	201/01205	. . tRNA (cytidine32/guanosine34-2'-O)-methyltransferase (2.1.1.205)
201/01174	. . 23S rRNA (guanine1835-N2)-methyltransferase (2.1.1.174)	201/01206	. . tRNA (cytidine56-2'-O)-methyltransferase (2.1.1.206)
201/01175	. . Tricin synthase (2.1.1.175)	201/01207	. . tRNA (cytidine34-2'-O)-methyltransferase (2.1.1.207)
201/01176	. . 16S rRNA (cytosine967-C5)-methyltransferase (2.1.1.176)	201/01208	. . 23S rRNA (uridine2479-2'-O)-methyltransferase (2.1.1.208)
201/01177	. . 23S rRNA (pseudouridine1915-N3)-methyltransferase (2.1.1.177)	201/01209	. . 23S rRNA (guanine2535-N1)-methyltransferase (2.1.1.209)
201/01178	. . 16S rRNA (cytosine1407-C5)-methyltransferase (2.1.1.178)	201/0121	. . Demethylspheroidene O-methyltransferase (2.1.1.210)
201/01179	. . 16S rRNA (guanine1405-N7)-methyltransferase (2.1.1.179)	201/01211	. . tRNA(Ser) (uridine44-2'-O)-methyltransferase (2.1.1.211)
201/0118	. . 16S rRNA (adenine1408-N1)-methyltransferase (2.1.1.180)	201/01212	. . 2,7,4'-Trihydroxyisoflavanone 4'-O-methyltransferase (2.1.1.212)
201/01181	. . 23S rRNA (adenine1618-N6)-methyltransferase (2.1.1.181)	201/01213	. . tRNA (guanine10-N2)-dimethyltransferase (2.1.1.213)
201/01182	. . 16S rRNA (adenine1518-N6/adenine1519-N6)-dimethyltransferase (2.1.1.182)	201/01214	. . tRNA (guanine10-N2)-methyltransferase (2.1.1.214)
201/01183	. . 18S rRNA (adenine1779-N6/adenine1780-N6)-dimethyltransferase (2.1.1.183)	201/01215	. . tRNA (guanine26-N2/guanine27-N2)-dimethyltransferase (2.1.1.215)
201/01184	. . 23S rRNA (adenine2085-N6)-dimethyltransferase (2.1.1.184)	201/01216	. . tRNA (guanine26-N2)-dimethyltransferase (2.1.1.216)
201/01185	. . 23S rRNA (guanine2251-2'-O)-methyltransferase (2.1.1.185)	201/01217	. . tRNA (adenine22-N1)-methyltransferase (2.1.1.217)
201/01186	. . 23S rRNA (cytidine2498-2'-O)-methyltransferase (2.1.1.186)	201/01218	. . tRNA (adenine9-N1)-methyltransferase (2.1.1.218)
201/01187	. . 23S rRNA (guanine745-N1)-methyltransferase (2.1.1.187)	201/01219	. . tRNA (adenine57-N1/adenine58-N1)-methyltransferase (2.1.1.219)
201/01188	. . 23S rRNA (guanine748-N1)-methyltransferase (2.1.1.188)	201/0122	. . tRNA (adenine58-N1)-methyltransferase (2.1.1.220)
201/01189	. . 23S rRNA (uracil747-C5)-methyltransferase (2.1.1.189)	201/01221	. . tRNA (guanine9-N1)-methyltransferase (2.1.1.221)
201/0119	. . 23S rRNA (uracil1939-C5)-methyltransferase (2.1.1.190)	201/01222	. . 2-Polyprenyl-6-hydroxyphenyl methylase (2.1.1.222)
201/01191	. . 23S rRNA (cytosine1962-C5)-methyltransferase (2.1.1.191)	201/01223	. . tRNA1(Val) (adenine37-N6)-methyltransferase (2.1.1.223)
201/01192	. . 23S rRNA (adenine2503-C2)-methyltransferase (2.1.1.192)	201/01224	. . 23S rRNA (adenine2503-C8)-methyltransferase (2.1.1.224)
201/01193	. . 16S rRNA (uracil1498-N3)-methyltransferase (2.1.1.193)	201/01225	. . tRNA:m4X modification enzyme (2.1.1.225)
201/01194	. . 23S rRNA (adenine2503-C2,C8)-dimethyltransferase (2.1.1.194) <a href="#">(C12Y 201/01192, C12Y 201/01224 take precedence)</a>	201/01226	. . 23S rRNA (cytidine1920-2'-O)-methyltransferase (2.1.1.226)
201/01195	. . Cobalt-precorrin-5B (C1)-methyltransferase (2.1.1.195)	201/01227	. . 16S rRNA (cytidine1409-2'-O)-methyltransferase (2.1.1.227)
201/01196	. . Cobalt-precorrin-7 (C15)-methyltransferase (decarboxylating) (2.1.1.196)	201/01228	. . tRNA (guanine37-N1)-methyltransferase (2.1.1.228)
201/01197	. . Malonyl-CoA O-methyltransferase (2.1.1.197)	201/01229	. . tRNA (carboxymethyluridine34-5-O)-methyltransferase (2.1.1.229)
201/01198	. . 16S rRNA (cytidine1402-2'-O)-methyltransferase (2.1.1.198)	201/0123	. . 23S rRNA (adenosine1067-2'-O)-methyltransferase (2.1.1.230)
201/01199	. . 16S rRNA (cytosine1402-N4)-methyltransferase (2.1.1.199)	201/01231	. . Flavonoid 4'-O-methyltransferase (2.1.1.231)
201/012	. . tRNA (cytidine32/uridine32-2'-O)-methyltransferase (2.1.1.200)	201/01232	. . Naringenin 7-O-methyltransferase (2.1.1.232)
201/01201	. . 2-Methoxy-6-polyprenyl-1,4-benzoquinol methylase (2.1.1.201)	201/01233	. . [Phosphatase 2A protein]-leucine-carboxy methyltransferase (2.1.1.233)
201/01202	. . Multisite-specific tRNA:(cytosine-C5)-methyltransferase (2.1.1.202)	201/01234	. . dTDP-3-amino-3,4,6-trideoxy-alpha-D-glucopyranose N,N-dimethyltransferase (2.1.1.234)
201/01203	. . tRNA (cytosine34-C5)-methyltransferase (2.1.1.203)	201/01235	. . dTDP-3-amino-3,6-dideoxy-alpha-D-glucopyranose N,N-dimethyltransferase (2.1.1.235)

- 201/01236 . . dTDP-3-amino-3,6-dideoxy- $\alpha$ -D-galactopyranose N,N-dimethyltransferase (2.1.1.236)
- 201/01237 . . Mycinamicin III 3"-O-methyltransferase (2.1.1.237)
- 201/01238 . . Mycinamicin VI 2"-O-methyltransferase (2.1.1.238)
- 201/01239 . . L-Olivosyl-oleandolide 3-O-methyltransferase (2.1.1.239)
- 201/0124 . . Trans-resveratrol di-O-methyltransferase (2.1.1.240)
- 201/01241 . . 2,4,7-Trihydroxy-1,4-benzoxazin-3-one-glucoside 7-O-methyltransferase (2.1.1.241)
- 201/01242 . . 16S rRNA (guanine1516-N2)-methyltransferase (2.1.1.242)
- 201/01243 . . 2-Ketoarginine methyltransferase (2.1.1.243)
- 201/01244 . . Protein N-terminal methyltransferase (2.1.1.244)
- 201/01245 . . 5-Methyltetrahydro sarcinapterin:corrinoide/iron-sulfur protein Co-methyltransferase (2.1.1.245)
- 201/01246 . . [Methyl-Co(III) methanol-specific corrinoide protein]:coenzyme M methyltransferase (2.1.1.246)
- 201/01247 . . [Methyl-Co(III) methylamine-specific corrinoide protein]:coenzyme M methyltransferase (2.1.1.247)
- 201/01248 . . Methylamine—corrinoide protein Co-methyltransferase (2.1.1.248)
- 201/01249 . . Dimethylamine—corrinoide protein Co-methyltransferase (2.1.1.249)
- 201/0125 . . Trimethylamine—corrinoide protein Co-methyltransferase (2.1.1.250)
- 201/01251 . . Methylated-thiol—coenzyme M methyltransferase (2.1.1.251)
- 201/01252 . . Tetramethylammonium—corrinoide protein Co-methyltransferase (2.1.1.252)
- 201/01253 . . [Methyl-Co(III) tetramethylammonium-specific corrinoide 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:corrinoide/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 carboxytransferase (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)	203/01054	. . Formate C-acetyltransferase (2.3.1.54), i.e. pyruvate formate-lyase or PFL
203/01008	. . Phosphate acetyltransferase (2.3.1.8)	203/01056	. . Aromatic-hydroxylamine O-acetyltransferase (2.3.1.56)
203/01009	. . Acetyl-CoA C-acetyltransferase (2.3.1.9)	203/01057	. . Diamine N-acetyltransferase (2.3.1.57)
203/0101	. . Hydrogen-sulfide S-acetyltransferase (2.3.1.10)	203/01058	. . 2,3-Diaminopropionate N-oxalyltransferase (2.3.1.58)
203/01011	. . Thioethanolamine S-acetyltransferase (2.3.1.11)	203/01059	. . Gentamicin 2'-N-acetyltransferase (2.3.1.59)
203/01012	. . Dihydrolipoyllysine-residue acetyltransferase (2.3.1.12)	203/0106	. . Gentamicin 3'-N-acetyltransferase (2.3.1.60)
203/01013	. . Glycine N-acyltransferase (2.3.1.13)	203/01061	. . Dihydrolipoyllysine-residue succinyltransferase (2.3.1.61)
203/01014	. . Glutamine N-phenylacetyltransferase (2.3.1.14)	203/01062	. . 2-Acylglycerophosphocholine O-acyltransferase (2.3.1.62)
203/01015	. . Glycerol-3-phosphate O-acyltransferase (2.3.1.15)	203/01063	. . 1-Alkylglycerophosphocholine O-acyltransferase (2.3.1.63)
203/01016	. . Acetyl-CoA C-acyltransferase (2.3.1.16)	203/01064	. . Agmatine N4-coumaroyltransferase (2.3.1.64)
203/01017	. . Aspartate N-acetyltransferase (2.3.1.17)	203/01065	. . Bile acid-CoA:amino acid N-acyltransferase (2.3.1.65)
203/01018	. . Galactoside O-acetyltransferase (2.3.1.18)	203/01066	. . Leucine N-acetyltransferase (2.3.1.66)
203/01019	. . Phosphate butyryltransferase (2.3.1.19)	203/01067	. . 1-Alkylglycerophosphocholine O-acetyltransferase (2.3.1.67)
203/0102	. . Diacylglycerol O-acyltransferase (2.3.1.20)	203/01068	. . Glutamine N-acyltransferase (2.3.1.68)
203/01021	. . Carnitine O-palmitoyltransferase (2.3.1.21)	203/01069	. . Monoterpenol O-acetyltransferase (2.3.1.69)
203/01022	. . 2-Acylglycerol O-acyltransferase (2.3.1.22)	203/01071	. . Glycine N-benzoyltransferase (2.3.1.71)
203/01023	. . 1-Acylglycerophosphocholine O-acyltransferase (2.3.1.23), i.e. lysophosphatidylcholine acyltransferase or LPCAT	203/01072	. . Indoleacetylglucose--inositol O-acyltransferase (2.3.1.72)
203/01024	. . Sphingosine N-acyltransferase (2.3.1.24)	203/01073	. . Diacylglycerol-sterol O-acyltransferase (2.3.1.73)
203/01025	. . Plasmalogen synthase (2.3.1.25)	203/01074	. . Naringenin-chalcone synthase (2.3.1.74), i.e. chalcone synthase
203/01026	. . Sterol O-acyltransferase (2.3.1.26)	203/01075	. . Long-chain-alcohol O-fatty-acyltransferase (2.3.1.75)
203/01027	. . Cortisol O-acetyltransferase (2.3.1.27)	203/01076	. . Retinol O-fatty-acyltransferase (2.3.1.76)
203/01028	. . Chloramphenicol O-acetyltransferase (2.3.1.28)	203/01077	. . Triacylglycerol--sterol O-acyltransferase (2.3.1.77)
203/01029	. . Glycine C-acetyltransferase (2.3.1.29)	203/01078	. . Heparan-alpha-glucosaminide N-acetyltransferase (2.3.1.78)
203/0103	. . Serine O-acetyltransferase (2.3.1.30)	203/01079	. . Maltose O-acetyltransferase (2.3.1.79)
203/01031	. . Homoserine O-acetyltransferase (2.3.1.31)	203/0108	. . Cysteine-S-conjugate N-acetyltransferase (2.3.1.80)
203/01032	. . Lysine N-acetyltransferase (2.3.1.32)	203/01081	. . Aminoglycoside N3'-acetyltransferase (2.3.1.81)
203/01033	. . Histidine N-acetyltransferase (2.3.1.33)	203/01082	. . Aminoglycoside N6'-acetyltransferase (2.3.1.82)
203/01034	. . D-Tryptophan N-acetyltransferase (2.3.1.34)	203/01083	. . Phosphatidylcholine--dolichol O-acyltransferase (2.3.1.83)
203/01035	. . Glutamate N-acetyltransferase (2.3.1.35)	203/01084	. . Alcohol O-acetyltransferase (2.3.1.84)
203/01036	. . D-Amino-acid N-acetyltransferase (2.3.1.36)	203/01085	. . Fatty-acid synthase (2.3.1.85)
203/01037	. . 5-Aminolevulinate synthase (2.3.1.37)	203/01086	. . Fatty-acyl-CoA synthase (2.3.1.86)
203/01038	. . [Acyl-carrier-protein] S-acetyltransferase (2.3.1.38)	203/01087	. . Aralkylamine N-acetyltransferase (2.3.1.87)
203/01039	. . [Acyl-carrier-protein] S-malonyltransferase (2.3.1.39)	203/01088	. . Peptide alpha-N-acetyltransferase (2.3.1.88)
203/0104	. . Acyl-[acyl-carrier-protein]-phospholipid O-acyltransferase (2.3.1.40)	203/01089	. . Tetrahydrodipicolinate N-acetyltransferase (2.3.1.89)
203/01041	. . Beta-ketoacyl-acyl-carrier-protein synthase I (2.3.1.41)	203/0109	. . Beta-glucogallin O-galloyltransferase (2.3.1.90)
203/01042	. . Glycerone-phosphate O-acyltransferase (2.3.1.42)	203/01091	. . Sinapoylglucose--choline O-sinapoyltransferase (2.3.1.91)
203/01043	. . Phosphatidylcholine-sterol O-acyltransferase (2.3.1.43), i.e. lecithin-cholesterol acyltransferase or LCAT	203/01092	. . Sinapoylglucose--malate O-sinapoyltransferase (2.3.1.92)
203/01044	. . Acetyl-CoA:N-acetylneuraminate 4-O-acetyltransferase (2.3.1.44)	203/01093	. . 13-Hydroxylupanine O-tigloyltransferase (2.3.1.93)
203/01045	. . N-Acetylneuraminate 7-O (or 9-O)-acetyltransferase (2.3.1.45)	203/01094	. . 6-Deoxyerythronolide-B synthase (2.3.1.94)
203/01046	. . Homoserine O-succinyltransferase (2.3.1.46)	203/01095	. . Trihydroxystilbene synthase (2.3.1.95)
203/01047	. . 8-Amino-7-oxononanoate synthase (2.3.1.47)	203/01096	. . Glycoprotein N-palmitoyltransferase (2.3.1.96)
203/01048	. . Histone acetyltransferase (2.3.1.48)	203/01097	. . Glycylpeptide N-tetradecanoyltransferase (2.3.1.97)
203/01049	. . Deacetyl-[citrate-(pro-3S)-lyase] S-acetyltransferase (2.3.1.49)		
203/0105	. . Serine C-palmitoyltransferase (2.3.1.50)		
203/01051	. . 1-Acylglycerol-3-phosphate O-acyltransferase (2.3.1.51)		
203/01052	. . 2-Acylglycerol-3-phosphate O-acyltransferase (2.3.1.52)		
203/01053	. . Phenylalanine N-acetyltransferase (2.3.1.53)		

203/01098	.. Chlorogenate--glucarate O-hydroxycinnamoyltransferase (2.3.1.98)	203/01138	.. Putrescine N-hydroxycinnamoyltransferase (2.3.1.138)
203/01099	.. Quinate O-hydroxycinnamoyltransferase (2.3.1.99)	203/01139	.. Ecdysone O-acyltransferase (2.3.1.139)
203/011	.. [Myelin-proteolipid] O-palmitoyltransferase (2.3.1.100)	203/0114	.. Rosmarinate synthase (2.3.1.140)
203/01101	.. Formylmethanofuran--tetrahydromethanopterin N-formyltransferase (2.3.1.101)	203/01141	.. Galactosylacylglycerol O-acyltransferase (2.3.1.141)
203/01102	.. N6-Hydroxylysine O-acetyltransferase (2.3.1.102)	203/01142	.. Glycoprotein O-fatty-acyltransferase (2.3.1.142)
203/01103	.. Sinapoylglucose--sinapoylglucose O-sinapoyltransferase (2.3.1.103)	203/01143	.. Beta-glucogallin--tetrakisgalloylglucose O-galloyltransferase (2.3.1.143)
203/01104	.. 1-Alkenylglycerophosphocholine O-acyltransferase (2.3.1.104)	203/01144	.. Anthranilate N-benzoyltransferase (2.3.1.144)
203/01105	.. Alkylglycerophosphate 2-O-acetyltransferase (2.3.1.105)	203/01145	.. Piperidine N-piperoyltransferase (2.3.1.145)
203/01106	.. Tartronate O-hydroxycinnamoyltransferase (2.3.1.106)	203/01146	.. Pinosylvin synthase (2.3.1.146)
203/01107	.. Deacetylindoline O-acetyltransferase (2.3.1.107)	203/01147	.. Glycerophospholipid arachidonoyl-transferase (CoA-independent) (2.3.1.147)
203/01108	.. Alpha-tubulin N-acetyltransferase (2.3.1.108)	203/01148	.. Glycerophospholipid acyltransferase (CoA-dependent) (2.3.1.148)
203/01109	.. Arginine N-succinyltransferase (2.3.1.109)	203/01149	.. Platelet-activating factor acetyltransferase (2.3.1.149)
203/0111	.. Tyramine N-feruloyltransferase (2.3.1.110)	203/0115	.. Salutaridinol 7-O-acetyltransferase (2.3.1.150)
203/01111	.. Mycocerosate synthase (2.3.1.111)	203/01151	.. Benzophenone synthase (2.3.1.151)
203/01112	.. D-Tryptophan N-malonyltransferase (2.3.1.112)	203/01152	.. Alcohol O-cinnamoyltransferase (2.3.1.152)
203/01113	.. Anthranilate N-malonyltransferase (2.3.1.113)	203/01153	.. Anthocyanin 5-aromatic acyltransferase (2.3.1.153)
203/01114	.. 3,4-Dichloroaniline N-malonyltransferase (2.3.1.114)	203/01154	.. Propionyl-CoA C(2)-trimethyltridecanoyltransferase (2.3.1.154)
203/01115	.. Isoflavone-7-O-beta-glucoside 6"-O-malonyltransferase (2.3.1.115)	203/01155	.. Acetyl-CoA C-myristoyltransferase (2.3.1.155)
203/01116	.. Flavonol-3-O-beta-glucoside O-malonyltransferase (2.3.1.116)	203/01156	.. Phloroisovalerophenone synthase (2.3.1.156)
203/01117	.. 2,3,4,5-Tetrahydropyridine-2,6-dicarboxylate N-succinyltransferase (2.3.1.117)	203/01157	.. Glucosamine-1-phosphate N-acetyltransferase (2.3.1.157)
203/01118	.. N-Hydroxyarylamine O-acetyltransferase (2.3.1.118)	203/01158	.. Phospholipid:diacylglycerol acyltransferase (2.3.1.158)
203/01119	.. Icosanoyl-CoA synthase (2.3.1.119)	203/01159	.. Acridone synthase (2.3.1.159)
203/01121	.. 1-Alkenylglycerophosphoethanolamine O-acyltransferase (2.3.1.121)	203/0116	.. Vinorine synthase (2.3.1.160)
203/01122	.. Trehalose O-mycosyltransferase (2.3.1.122)	203/01161	.. Lovastatin nonaketide synthase (2.3.1.161)
203/01123	.. Dolichol O-acyltransferase (2.3.1.123)	203/01162	.. Taxadien-5-alpha-ol O-acetyltransferase (2.3.1.162)
203/01125	.. 1-Alkyl-2-acetylgllycerol O-acyltransferase (2.3.1.125)	203/01163	.. 10-Hydroxytaxane O-acetyltransferase (2.3.1.163)
203/01126	.. Isocitrate O-dihydroxycinnamoyltransferase (2.3.1.126)	203/01164	.. Isopenicillin-N N-acyltransferase (2.3.1.164)
203/01127	.. Ornithine N-benzoyltransferase (2.3.1.127)	203/01165	.. 6-Methylsalicylic acid synthase (2.3.1.165)
203/01128	.. Ribosomal-protein-alanine N-acetyltransferase (2.3.1.128)	203/01166	.. 2-Alpha-hydroxytaxane 2-O-benzoyltransferase (2.3.1.166)
203/01129	.. Acyl-[acyl-carrier-protein]-UDP-N-acetylglucosamine O-acyltransferase (2.3.1.129)	203/01167	.. 10-Deacetylbaicatin III 10-O-acetyltransferase (2.3.1.167)
203/0113	.. Galactarate O-hydroxycinnamoyltransferase (2.3.1.130)	203/01168	.. Dihydrolipoyllysine-residue (2-methylpropanoyl)transferase (2.3.1.168)
203/01131	.. Glucarate O-hydroxycinnamoyltransferase (2.3.1.131)	203/01169	.. CO-Methylating acetyl-CoA synthase (2.3.1.169)
203/01132	.. Glucarolactone O-hydroxycinnamoyltransferase (2.3.1.132)	203/0117	.. 6'-Deoxychalcone synthase (2.3.1.170)
203/01133	.. Shikimate O-hydroxycinnamoyltransferase (2.3.1.133)	203/01171	.. Anthocyanin 6"-O-malonyltransferase (2.3.1.171)
203/01134	.. Galactolipid O-acyltransferase (2.3.1.134)	203/01172	.. Anthocyanin 5-O-glucoside 6'''-O-malonyltransferase (2.3.1.172)
203/01135	.. Phosphatidylcholine--retinol O-acyltransferase (2.3.1.135)	203/01173	.. Flavonol-3-O-triglucoside O-coumaroyltransferase (2.3.1.173)
203/01136	.. Polysialic-acid O-acetyltransferase (2.3.1.136)	203/01174	.. 3-Oxoadipyl-CoA thiolase (2.3.1.174)
203/01137	.. Carnitine O-octanoyltransferase (2.3.1.137)	203/01175	.. Deacetylcephalosporin-C acetyltransferase (2.3.1.175)
		203/01176	.. Propanoyl-CoA C-acyltransferase (2.3.1.176)
		203/01177	.. 3,5-Dihydroxybiphenyl synthase (2.3.1.177)
		203/01178	.. Diaminobutyrate acetyltransferase (2.3.1.178)
		203/01179	.. Beta-ketoacyl-acyl-carrier-protein synthase II (2.3.1.179)
		203/0118	.. Beta-ketoacyl-acyl-carrier-protein synthase III (2.3.1.180)

- 203/01181 . . Lipoyl(octanoyl) transferase (2.3.1.181)  
 203/01182 . . (R)-Citramalate synthase (2.3.1.182)  
 203/01183 . . Phosphinothricin acetyltransferase (2.3.1.183)  
 203/01184 . . Acyl-homoserine-lactone synthase (2.3.1.184)  
 203/01185 . . Tropine acyltransferase (2.3.1.185)  
 203/01186 . . Pseudotropine acyltransferase (2.3.1.186)  
 203/01187 . . Acetyl-S-ACP:malonate ACP transferase (2.3.1.187)  
 203/01188 . . Omega-hydroxypalmitate O-feruloyl transferase (2.3.1.188)  
 203/01189 . . Mycothiol synthase (2.3.1.189)  
 203/0119 . . Acetoin dehydrogenase (2.3.1.190)  
 203/01191 . . UDP-3-O-(3-hydroxymyristoyl)glucosamine N-acyltransferase (2.3.1.191)  
 203/01192 . . Glycine N-phenylacetyltransferase (2.3.1.192)  
 203/01193 . . tRNA(Met) cytidine acetyltransferase (2.3.1.193)  
 203/01194 . . Acetoacetyl-CoA synthase (2.3.1.194)  
 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. phytochelatase 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 . . Dextransucrase (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)	204/0107	. . Poly(ribitol-phosphate) N-acetylglucosaminyltransferase (2.4.1.70)
204/01031	. . Laminaribiose phosphorylase (2.4.1.31)	204/01071	. . Arylamine glucosyltransferase (2.4.1.71)
204/01032	. . Glucomannan 4-beta-mannosyltransferase (2.4.1.32)	204/01073	. . Lipopolysaccharide glucosyltransferase II (2.4.1.73)
204/01033	. . Alginate synthase (2.4.1.33)	204/01074	. . Glycosaminoglycan galactosyltransferase (2.4.1.74)
204/01034	. . 1,3-Beta-glucan synthase (2.4.1.34)	204/01078	. . Phosphopolyprenol glucosyltransferase (2.4.1.78)
204/01035	. . Phenol beta-glucosyltransferase (2.4.1.35)	204/01079	. . Globotriaosylceramide 3-beta-N-acetylgalactosaminyltransferase (2.4.1.79)
204/01036	. . Alpha,alpha-trehalose-phosphate synthase (GDP-forming) (2.4.1.36)	204/0108	. . Ceramide glucosyltransferase (2.4.1.80)
204/01037	. . Fucosylgalactoside 3-alpha-galactosyltransferase (2.4.1.37)	204/01081	. . Flavone 7-O-beta-glucosyltransferase (2.4.1.81)
204/01038	. . Beta-N-acetylglucosaminylglycopeptide beta-1,4-galactosyltransferase (2.4.1.38)	204/01082	. . Galactinol--sucrose galactosyltransferase (2.4.1.82)
204/01039	. . Steroid N-acetylglucosaminyltransferase (2.4.1.39)	204/01083	. . Dolichyl-phosphate beta-D-mannosyltransferase (2.4.1.83)
204/0104	. . Glycoprotein-fucosylgalactoside alpha-N-acetylgalactosaminyltransferase (2.4.1.40)	204/01085	. . Cyanohydrin beta-glucosyltransferase (2.4.1.85)
204/01041	. . Polypeptide N-acetylgalactosaminyltransferase (2.4.1.41)	204/01086	. . Glucosaminylgalactosylglucosylceramide beta-galactosyltransferase (2.4.1.86)
204/01043	. . Polygalacturonate 4-alpha-galacturonosyltransferase (2.4.1.43)	204/01087	. . N-Acetylactosaminide 3-alpha-galactosyltransferase (2.4.1.87), i.e. alpha-1,3-galactosyltransferase
204/01044	. . Lipopolysaccharide 3-alpha-galactosyltransferase (2.4.1.44)	204/01088	. . Globoside alpha-N-acetylglactosaminyltransferase (2.4.1.88)
204/01045	. . 2-Hydroxyacylsphingosine 1-beta-galactosyltransferase (2.4.1.45)	204/0109	. . N-Acetylactosamine synthase (2.4.1.90)
204/01046	. . Monogalactosyldiacylglycerol synthase (2.4.1.46)	204/01091	. . Flavonol 3-O-glucosyltransferase (2.4.1.91)
204/01047	. . N-Acylsphingosine galactosyltransferase (2.4.1.47)	204/01092	. . (N-acetylneuraminy)-galactosylglucosylceramide N-acetylglactosaminyltransferase (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)
		204/01117	. . Dolichyl-phosphate beta-glucosyltransferase (2.4.1.117)



204/01118	. . Cytokinin 7-beta-glucosyltransferase (2.4.1.118)	204/01155	. . Alpha-1,6-mannosyl-glycoprotein 6-beta-N-acetylglucosaminyltransferase (2.4.1.155)
204/01112	. . Sinapate 1-glucosyltransferase (2.4.1.120)	204/01156	. . Indolylacetyl-myo-inositol galactosyltransferase (2.4.1.156)
204/01121	. . Indole-3-acetate beta-glucosyltransferase (2.4.1.121)	204/01157	. . 1,2-Diacylglycerol 3-glucosyltransferase (2.4.1.157)
204/01122	. . Glycoprotein-N-acetylgalactosamine 3-beta-galactosyltransferase (2.4.1.122)	204/01158	. . 13-Hydroxydocosanoate 13-beta-glucosyltransferase (2.4.1.158)
204/01123	. . Inositol 3-alpha-galactosyltransferase (2.4.1.123), i.e. galactinol-synthase	204/01159	. . Flavonol-3-O-glucoside L-rhamnosyltransferase (2.4.1.159)
204/01125	. . Sucrose--1,6-alpha-glucan 3(6)-alpha-glucosyltransferase (2.4.1.125)	204/0116	. . Pyridoxine 5'-O-beta-D-glucosyltransferase (2.4.1.160)
204/01126	. . Hydroxycinnamate 4-beta-glucosyltransferase (2.4.1.126)	204/01161	. . Oligosaccharide 4-alpha-D-glucosyltransferase (2.4.1.161)
204/01127	. . Monoterpenol beta-glucosyltransferase (2.4.1.127)	204/01162	. . Aldose beta-D-fructosyltransferase (2.4.1.162)
204/01128	. . Scopoletin glucosyltransferase (2.4.1.128)	204/01163	. . Beta-galactosyl-N-acetylglucosaminylgalactosylglucosyl-ceramide beta-1,3-acetylglucosaminyltransferase (2.4.1.163)
204/01129	. . Peptidoglycan glycosyltransferase (2.4.1.129)	204/01164	. . Galactosyl-N-acetylglucosaminylgalactosylglucosyl-ceramide beta-1,6-N-acetylglucosaminyltransferase (2.4.1.164)
204/0113	. . Dolichyl-phosphate-mannose-glycolipid alpha-mannosyltransferase (2.4.1.130) <a href="#">(C12Y 204/01258 - C12Y 204/01261 take precedence)</a>	204/01165	. . N-Acetylneuraminylgalactosylglucosylceramide beta-1,4-N-acetylglactosaminyltransferase (2.4.1.165)
204/01131	. . GDP-Man:Man3GlcNAc2-PP-dolichol alpha-1,2-mannosyltransferase (2.4.1.131)	204/01166	. . Raffinose--raffinose alpha-galactosyltransferase (2.4.1.166)
204/01132	. . GDP-Man:Man1GlcNAc2-PP-dolichol alpha-1,3-mannosyltransferase (2.4.1.132)	204/01167	. . Sucrose 6F-alpha-galactosyltransferase (2.4.1.167)
204/01133	. . Xylosylprotein 4-beta-galactosyltransferase (2.4.1.133)	204/01168	. . Xyloglucan 4-glucosyltransferase (2.4.1.168)
204/01134	. . Galactosylxylosylprotein 3-beta-galactosyltransferase (2.4.1.134)	204/0117	. . Isoflavone 7-O-glucosyltransferase (2.4.1.170)
204/01135	. . Galactosylgalactosylxylosylprotein 3-beta-glucuronosyltransferase (2.4.1.135)	204/01171	. . Methyl-ONN-azoxymethanol beta-D-glucosyltransferase (2.4.1.171)
204/01136	. . Gallate 1-beta-glucosyltransferase (2.4.1.136)	204/01172	. . Salicyl-alcohol beta-D-glucosyltransferase (2.4.1.172)
204/01137	. . sn-Glycerol-3-phosphate 2-alpha-galactosyltransferase (2.4.1.137)	204/01173	. . Sterol 3-beta-glucosyltransferase (2.4.1.173)
204/01138	. . Mannotetraose 2-alpha-N-acetylglucosaminyltransferase (2.4.1.138)	204/01174	. . Glucuronylgalactosylproteoglycan 4-beta-N-acetylglactosaminyltransferase (2.4.1.174), i.e. chondroitin sulfate N-acetylglactosaminyltransferase-1
204/01139	. . Maltose synthase (2.4.1.139)	204/01175	. . Glucuronosyl-N-acetylglactosaminyl-proteoglycan 4-beta-N-acetylglactosaminyltransferase II (2.4.1.175)
204/0114	. . Alternansucrase (2.4.1.140)	204/01176	. . Gibberellin beta-D-glucosyltransferase (2.4.1.176)
204/01141	. . N-Acetylglucosaminylidiphosphodolichol N-acetylglucosaminyltransferase (2.4.1.141)	204/01177	. . Cinnamate beta-D-glucosyltransferase (2.4.1.177)
204/01142	. . Chitobiosylidiphosphodolichol beta-mannosyltransferase (2.4.1.142)	204/01178	. . Hydroxymandelonitrile glucosyltransferase (2.4.1.178)
204/01143	. . Alpha-1,6-mannosyl-glycoprotein 2-beta-N-acetylglucosaminyltransferase (2.4.1.143)	204/01179	. . Lactosylceramide beta-1,3-galactosyltransferase (2.4.1.179)
204/01144	. . Beta-1,4-mannosyl-glycoprotein 4-beta-N-acetylglucosaminyltransferase (2.4.1.144)	204/0118	. . Lipopolysaccharide N-acetylmannosaminouronosyltransferase (2.4.1.180)
204/01145	. . Alpha-1,3-mannosyl-glycoprotein 4-beta-N-acetylglucosaminyltransferase (2.4.1.145)	204/01181	. . Hydroxyanthraquinone glucosyltransferase (2.4.1.181)
204/01146	. . Beta-1,3-galactosyl-O-glycosyl-glycoprotein beta-1,3-N-acetylglucosaminyltransferase (2.4.1.146)	204/01182	. . Lipid-A-disaccharide synthase (2.4.1.182)
204/01147	. . Acetylglactosaminyl-O-glycosyl-glycoprotein beta-1,3-N-acetylglucosaminyltransferase (2.4.1.147)	204/01183	. . Alpha-1,3-glucan synthase (2.4.1.183)
204/01148	. . Acetylglactosaminyl-O-glycosyl-glycoprotein beta-1,6-N-acetylglucosaminyltransferase (2.4.1.148)	204/01184	. . Galactolipid galactosyltransferase (2.4.1.184)
204/01149	. . N-Acetylglactosaminide beta-1,3-N-acetylglucosaminyltransferase (2.4.1.149)	204/01185	. . Flavanone 7-O-beta-glucosyltransferase (2.4.1.185)
204/0115	. . N-Acetylglactosaminide beta-1,6-N-acetylglucosaminyl-transferase (2.4.1.150)	204/01186	. . Glycogenin glucosyltransferase (2.4.1.186)
204/01152	. . 4-Galactosyl-N-acetylglucosaminide 3-alpha-L-fucosyltransferase (2.4.1.152)		
204/01153	. . Dolichyl-phosphate alpha-N-acetylglucosaminyltransferase (2.4.1.153)		

204/01187	. . N-Acetylglucosaminylidiphosphoundecaprenol N-acetyl-beta-D-mannosaminyltransferase (2.4.1.187)	204/01226	. . N-Acetylgalactosaminyl-proteoglycan 3-beta-glucuronosyltransferase (2.4.1.226), i.e. chondroitin sulfate glucuronyltransferase
204/01188	. . N-Acetylglucosaminylidiphosphoundecaprenol glucosyltransferase (2.4.1.188)	204/01227	. . Undecaprenyldiphospho-muramoylpentapeptide beta-N-acetylglucosaminyltransferase (2.4.1.227)
204/01189	. . Luteolin 7-O-glucuronosyltransferase (2.4.1.189)	204/01228	. . Lactosylceramide 4-alpha-galactosyltransferase (2.4.1.228)
204/0119	. . Luteolin-7-O-glucuronide 2''-O-glucuronosyltransferase (2.4.1.190)	204/01229	. . [Skp1-protein]-hydroxyproline N-acetylglucosaminyltransferase (2.4.1.229)
204/01191	. . Luteolin-7-O-diglucuronide 4'-O-glucuronosyltransferase (2.4.1.191)	204/0123	. . Kojibiose phosphorylase (2.4.1.230)
204/01192	. . Nuatigenin 3-beta-glucosyltransferase (2.4.1.192)	204/01231	. . Alpha,alpha-trehalose phosphorylase (configuration-retaining) (2.4.1.231)
204/01193	. . Sarsapogenin 3-beta-glucosyltransferase (2.4.1.193)	204/01232	. . Initiation-specific alpha-1,6-mannosyltransferase (2.4.1.232)
204/01194	. . 4-Hydroxybenzoate 4-O-beta-D-glucosyltransferase (2.4.1.194)	204/01234	. . Kaempferol 3-O-galactosyltransferase (2.4.1.234)
204/01195	. . N-Hydroxythioamide S-beta-glucosyltransferase (2.4.1.195)	204/01236	. . Flavanone 7-O-glucoside 2''-O-beta-L-rhamnosyltransferase (2.4.1.236)
204/01196	. . Nicotinate glucosyltransferase (2.4.1.196)	204/01237	. . Flavonol 7-O-beta-glucosyltransferase (2.4.1.237)
204/01197	. . High-mannose-oligosaccharide beta-1,4-N-acetylglucosaminyltransferase (2.4.1.197)	204/01238	. . Anthocyanin 3'-O-beta-glucosyltransferase (2.4.1.238)
204/01198	. . Phosphatidylinositol N-acetylglucosaminyltransferase (2.4.1.198)	204/01239	. . Flavonol-3-O-glucoside glucosyltransferase (2.4.1.239)
204/01199	. . Beta-mannosylphosphodecaprenol--mannooligosaccharide 6-mannosyltransferase (2.4.1.199)	204/0124	. . Flavonol-3-O-glycoside glucosyltransferase (2.4.1.240)
204/01201	. . Alpha-1,6-mannosyl-glycoprotein 4-beta-N-acetylglucosaminyltransferase (2.4.1.201)	204/01241	. . Digalactosyldiacylglycerol synthase (2.4.1.241)
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-acetylgalactosaminyltransferase (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)		
204/01225	. . N-Acetylglucosaminyl-proteoglycan 4-beta-glucuronosyltransferase (2.4.1.225)		

- 204/01263 . . Abscisate beta-glucosyltransferase (2.4.1.263)
- 204/01264 . . D-Man-alpha-(1->3)-D-Glc-beta-(1->4)-D-Glc-alpha-1-diphosphoundecaprenol 2-beta-glucuronyltransferase (2.4.1.264)
- 204/01265 . . Dolichyl-P-Glc:Glc1Man9GlcNAc2-PP-dolichol alpha-1,3-glucosyltransferase (2.4.1.265)
- 204/01266 . . Glucosyl-3-phosphoglycerate synthase (2.4.1.266)
- 204/01267 . . Dolichyl-P-Glc:Man9GlcNAc2-PP-dolichol alpha-1,3-glucosyltransferase (2.4.1.267)
- 204/01268 . . Glucosylglycerate synthase (2.4.1.268)
- 204/01269 . . Mannosylglycerate synthase (2.4.1.269)
- 204/0127 . . Mannosylglucosyl-3-phosphoglycerate synthase (2.4.1.270)
- 204/01271 . . Crocetin glucosyltransferase (2.4.1.271)
- 204/01272 . . Soyasapogenol B glucuronide galactosyltransferase (2.4.1.272)
- 204/01273 . . Soyasaponin III rhamnosyltransferase (2.4.1.273)
- 204/01274 . . Glucosylceramide beta-1,4-galactosyltransferase (2.4.1.274)
- 204/01275 . . Lactotriaosylceramide beta-1,4-galactosyltransferase (2.4.1.275)
- 204/01276 . . Zeaxanthin glucosyltransferase (2.4.1.276)
- 204/01277 . . Glycosyltransferase DesVII (2.4.1.277)
- 204/01278 . . Desosaminyl transferase EryCIII (2.4.1.278)
- 204/01279 . . Nigerose phosphorylase (2.4.1.279)
- 204/0128 . . N,N'-Diacetylchitobiose phosphorylase (2.4.1.280)
- 204/01281 . . 4-O-Beta-D-mannosyl-D-glucose phosphorylase (2.4.1.281)
- 204/01282 . . 3-O-Alpha-D-glucosyl-L-rhamnose phosphorylase (2.4.1.282)
- 204/01283 . . 2-Deoxystreptamine N-acetyl-D-glucosaminyltransferase (2.4.1.283)
- 204/01284 . . 2-Deoxystreptamine glucosyltransferase (2.4.1.284)
- 204/01285 . . UDP-GlcNAc:ribostamycin N-acetylglucosaminyltransferase (2.4.1.285)
- 204/01286 . . Chalcone 4'-O-glucosyltransferase (2.4.1.286)
- 204/01287 . . Rhamnopyranosyl-N-acetylglucosaminyl-diphospho-decaprenol beta-1,3/1,4-galactofuranosyltransferase (2.4.1.287)
- 204/01288 . . Galactofuranosylgalactofuranosylrhamnosyl-N-acetylglucosaminyl-diphospho-decaprenol beta-1,5/1,6-galactofuranosyltransferase (2.4.1.288)
- 204/01289 . . N-Acetylglucosaminyl-diphospho-decaprenol L-rhamnosyltransferase (2.4.1.289)
- 204/0129 . . N,N'-Diacetylbaucillosaminyl-diphospho-undecaprenol alpha-1,3-N-acetylglactosaminyltransferase (2.4.1.290)
- 204/01291 . . N-Acetylglactosamine-N,N'-diacetylbaucillosaminyl-diphospho-undecaprenol 4-alpha-N-acetylglactosaminyltransferase (2.4.1.291)
- 204/01292 . . GalNAc-alpha-(1->4)-GalNAc-alpha-(1->3)-diNAcBac-PP-undecaprenol alpha-1,4-N-acetyl-D-galactosaminyltransferase (2.4.1.292)
- 204/01293 . . GalNAc5-diNAcBac-PP-undecaprenol beta-1,3-glucosyltransferase (2.4.1.293)
- 204/02 . . Pentosyltransferases (2.4.2)
- 204/02001 . . Purine-nucleoside phosphorylase (2.4.2.1)
- 204/02002 . . Pyrimidine-nucleoside phosphorylase (2.4.2.2)
- 204/02003 . . Uridine phosphorylase (2.4.2.3)
- 204/02004 . . Thymidine phosphorylase (2.4.2.4)
- 204/02005 . . Nucleoside ribosyltransferase (2.4.2.5)
- 204/02006 . . Nucleoside deoxyribosyltransferase (2.4.2.6)
- 204/02007 . . Adenine phosphoribosyltransferase (2.4.2.7)
- 204/02008 . . Hypoxanthine phosphoribosyltransferase (2.4.2.8)
- 204/02009 . . Uracil phosphoribosyltransferase (2.4.2.9)
- 204/0201 . . Orotate phosphoribosyltransferase (2.4.2.10)
- 204/02011 . . Nicotinate phosphoribosyltransferase (2.4.2.11)
- 204/02012 . . Nicotinamide phosphoribosyltransferase (2.4.2.12), i.e. visfatin
- 204/02014 . . Amidophosphoribosyltransferase (2.4.2.14)
- 204/02015 . . Guanosine phosphorylase (2.4.2.15)
- 204/02016 . . Urate-ribonucleotide phosphorylase (2.4.2.16)
- 204/02017 . . ATP phosphoribosyltransferase (2.4.2.17)
- 204/02018 . . Anthranilate phosphoribosyltransferase (2.4.2.18)
- 204/02019 . . Nicotinate-nucleotide diphosphorylase (carboxylating) (2.4.2.19)
- 204/0202 . . Dioxotetrahydropyrimidine phosphoribosyltransferase (2.4.2.20)
- 204/02021 . . Nicotinate-nucleotide--dimethylbenzimidazole phosphoribosyltransferase (2.4.2.21)
- 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)
- 204/02025 . . Flavone apiosyltransferase (2.4.2.25)
- 204/02026 . . Protein xylosyltransferase (2.4.2.26)
- 204/02027 . . dTDP-dihydrostreptose--streptidine-6-phosphate dihydrostreptosyltransferase (2.4.2.27)
- 204/02028 . . S-Methyl-5'-thioadenosine phosphorylase (2.4.2.28)
- 204/02029 . . tRNA-guanosine34 transglycosylase (2.4.2.29)
- 204/0203 . . NAD+ ADP-ribosyltransferase (2.4.2.30), i.e. tankyrase or poly(ADP-ribose) polymerase
- 204/02031 . . NAD+-protein-arginine ADP-ribosyltransferase (2.4.2.31)
- 204/02032 . . Dolichyl-phosphate D-xylosyltransferase (2.4.2.32)
- 204/02033 . . Dolichyl-xylosyl-phosphate--protein xylosyltransferase (2.4.2.33)
- 204/02034 . . Indolylacetylinoitol arabinosyltransferase (2.4.2.34)
- 204/02035 . . Flavonol-3-O-glycoside xylosyltransferase (2.4.2.35)
- 204/02036 . . NAD(+)--diphthamide ADP-ribosyltransferase (2.4.2.36)
- 204/02037 . . NAD(+)--dinitrogen-reductase ADP-D-ribosyltransferase (2.4.2.37)
- 204/02038 . . Glycoprotein 2-beta-D-xylosyltransferase (2.4.2.38)
- 204/02039 . . Xyloglucan 6-xylosyltransferase (2.4.2.39)
- 204/0204 . . Zeatin O-beta-D-xylosyltransferase (2.4.2.40)
- 204/02041 . . Xylogalacturonan beta-1,3-xylosyltransferase (2.4.2.41)
- 204/02042 . . UDP-D-xylose;beta-D-glucoside alpha-1,3-D-xylosyltransferase (2.4.2.42)
- 204/02043 . . Lipid IVA 4-amino-4-deoxy-L-arabinosyltransferase (2.4.2.43)
- 204/02044 . . S-Methyl-5'-thioinosine phosphorylase (2.4.2.44)
- 204/02045 . . Decaprenyl-phosphate phosphoribosyltransferase (2.4.2.45)
- 204/02046 . . Galactan 5-O-arabinofuranosyltransferase (2.4.2.46)

204/02047	. . Arabinofuranan 3-O-arabinosyltransferase (2.4.2.47)	205/01017	. . Cob(I)yrinic acid a,c-diamide adenosyltransferase (2.5.1.17)
204/02048	. . tRNA-guanine15 transglycosylase (2.4.2.48)	205/01018	. . Glutathione transferase (2.5.1.18)
204/99	. transferring other glycosyl groups (2.4.99)	205/01019	. . 3-Phosphoshikimate 1-carboxyvinyltransferase (2.5.1.19), i.e. 5-enolpyruvylshikimate-3-phosphate synthase
204/99001	. . Beta-galactoside alpha-2,6-sialyltransferase (2.4.99.1)	205/0102	. . Rubber cis-polyprenylcistransferase (2.5.1.20)
204/99002	. . Monosialoganglioside sialyltransferase (2.4.99.2)	205/01021	. . Squalene synthase (2.5.1.21), i.e. farnesyl-disphosphate farnesyltransferase
204/99003	. . Alpha-N-acetylgalactosaminide alpha-2,6-sialyltransferase (2.4.99.3)	205/01022	. . Spermine synthase (2.5.1.22)
204/99004	. . Beta-galactoside alpha-2,3-sialyltransferase (2.4.99.4)	205/01023	. . Sym-norspermidine synthase (2.5.1.23)
204/99005	. . Galactosyldiacylglycerol alpha-2,3-sialyltransferase (2.4.99.5)	205/01024	. . Discadenine synthase (2.5.1.24)
204/99006	. . N-Acetylactosaminide alpha-2,3-sialyltransferase (2.4.99.6)	205/01025	. . tRNA-uridine aminocarboxypropyltransferase (2.5.1.25)
204/99007	. . Alpha-N-acetylneuraminy-2,3-beta-galactosyl-1,3-N-acetyl-galactosaminide 6-alpha-sialyltransferase (2.4.99.7)	205/01026	. . Alkylglycerone-phosphate synthase (2.5.1.26)
204/99008	. . Alpha-N-acetylneuraminate alpha-2,8-sialyltransferase (2.4.99.8)	205/01027	. . Adenylate dimethylallyltransferase (2.5.1.27)
204/99009	. . Lactosylceramide alpha-2,3-sialyltransferase (2.4.99.9)	205/01028	. . Dimethylallylcistransferase (2.5.1.28)
204/9901	. . Neolactotetraosylceramide alpha-2,3-sialyltransferase (2.4.99.10)	205/01029	. . Geranylgeranyl diphosphate synthase (2.5.1.29)
204/99011	. . Lactosylceramide alpha-2,6-N-sialyltransferase (2.4.99.11)	205/0103	. . Heptaprenyl diphosphate synthase (2.5.1.30)
204/99012	. . Lipid IVA 3-deoxy-D-manno-octulosonic acid transferase (2.4.99.12)	205/01031	. . Ditrans,polycis-undecaprenyl-diphosphate synthase [(2E,6E)-farnesyl-diphosphate specific] (2.5.1.31)
204/99013	. . (KDO)-lipid IVA 3-deoxy-D-manno-octulosonic acid transferase (2.4.99.13)	205/01032	. . 15-Cis-phytoene synthase (2.5.1.32)
204/99014	. . (KDO)2-lipid IVA (2-8) 3-deoxy-D-manno-octulosonic acid transferase (2.4.99.14)	205/01033	. . Trans-pentaprenyltranstransferase (2.5.1.33) ( <a href="#">C12Y 205/01082</a> , <a href="#">C12Y 205/01083 take precedence</a> )
204/99015	. . (KDO)3-lipid IVA (2-4) 3-deoxy-D-manno-octulosonic acid transferase (2.4.99.15)	205/01034	. . 4-Dimethylallyltryptophan synthase (2.5.1.34)
204/99016	. . Starch synthase (maltosyl-transferring) (2.4.99.16)	205/01035	. . Aspulvinone dimethylallyltransferase (2.5.1.35)
204/99017	. . S-Adenosylmethionine:tRNA ribosyltransferase-isomerase (2.4.99.17)	205/01036	. . Trihydroxyterocarpan dimethylallyltransferase (2.5.1.36)
204/99018	. . Dolichyl-diphosphooligosaccharide—protein glycotransferase (2.4.99.18)	205/01038	. . Isonocardicin synthase (2.5.1.38)
204/99019	. . Undecaprenyl-diphosphooligosaccharide—protein glycotransferase (2.4.99.19)	205/01039	. . 4-Hydroxybenzoate polyprenyltransferase (2.5.1.39)
<b>205/00</b>	<b>Transferases transferring alkyl or aryl groups, other than methyl groups (2.5)</b>	205/01041	. . Phosphoglycerol geranylgeranyltransferase (2.5.1.41)
205/01	. transferring alkyl or aryl groups, other than methyl groups (2.5.1)	205/01042	. . Geranylgeranyl-glycerol-phosphate geranylgeranyltransferase (2.5.1.42)
205/01001	. . Dimethylallyltranstransferase (2.5.1.1)	205/01043	. . Nicotianamine synthase (2.5.1.43)
205/01002	. . Thiamine pyridinylase (2.5.1.2)	205/01044	. . Homospermidine synthase (2.5.1.44)
205/01003	. . Thiamine-phosphate diphosphorylase (2.5.1.3)	205/01045	. . Homospermidine synthase (spermidine-specific) (2.5.1.45)
205/01004	. . Adenosylmethionine cyclotransferase (2.5.1.4)	205/01046	. . Deoxyhypusine synthase (2.5.1.46)
205/01005	. . Galactose-6-sulfurylase (2.5.1.5)	205/01047	. . Cysteine synthase (2.5.1.47)
205/01006	. . Methionine adenosyltransferase (2.5.1.6), i.e. adenosylmethionine synthetase	205/01048	. . Cystathionine gamma-synthase (2.5.1.48)
205/01007	. . UDP-N-acetylglucosamine 1-carboxyvinyltransferase (2.5.1.7)	205/01049	. . O-acetylhomoserine aminocarboxypropyltransferase (2.5.1.49)
205/01009	. . Riboflavin synthase (2.5.1.9)	205/0105	. . Zeatin 9-aminocarboxyethyltransferase (2.5.1.50)
205/0101	. . (2E,6E)-Farnesyl diphosphate synthase (2.5.1.10), i.e. geranyltranstransferase	205/01051	. . Beta-pyrazolylalanine synthase (2.5.1.51)
205/01011	. . Trans-octaprenyltranstransferase (2.5.1.11) ( <a href="#">C12Y 205/01084</a> , <a href="#">C12Y 205/01085 take precedence</a> )	205/01052	. . L-Mimosine synthase (2.5.1.52)
205/01015	. . Dihydropteroate synthase (2.5.1.15)	205/01053	. . Uracilylalanine synthase (2.5.1.53)
205/01016	. . Spermidine synthase (2.5.1.16)	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-acetylneuraminide synthase (2.5.1.56)
		205/01057	. . N-Acylneuraminide-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)	206/00	<b>Transferases transferring nitrogenous groups (2.6)</b>
205/01064	. . 2-Succinyl-6-hydroxy-2,4-cyclohexadiene-1-carboxylate synthase (2.5.1.64) (C12Y 202/01009, C12Y 402/9902 take precedence)	206/01	. . Transaminases (2.6.1)
205/01065	. . O-Phosphoserine sulfhydrylase (2.5.1.65)	206/01001	. . Aspartate transaminase (2.6.1.1), i.e. aspartate-aminotransferase
205/01066	. . N <sup>2</sup> -(2-Carboxyethyl)arginine synthase (2.5.1.66)	206/01002	. . Alanine transaminase (2.6.1.2), i.e. alanine-aminotransferase
205/01067	. . Chrysanthemyl diphosphate synthase (2.5.1.67)	206/01003	. . Cysteine transaminase (2.6.1.3)
205/01068	. . (2Z,6E)-Farnesyl diphosphate synthase (2.5.1.68)	206/01004	. . Glycine transaminase (2.6.1.4)
205/01069	. . Lavandulyl diphosphate synthase (2.5.1.69)	206/01005	. . Tyrosine transaminase (2.6.1.5)
205/0107	. . Naringenin 8-dimethylallyltransferase (2.5.1.70)	206/01006	. . Leucine transaminase (2.6.1.6)
205/01071	. . Leachianone-G 2"-dimethylallyltransferase (2.5.1.71)	206/01007	. . Kynurenine--oxoglutarate transaminase (2.6.1.7)
205/01072	. . Quinolinate synthase (2.5.1.72)	206/01008	. . 2,5-Diaminovalerate transaminase (2.6.1.8)
205/01073	. . O-Phospho-L-seryl-tRNA:Cys-tRNA synthase (2.5.1.73)	206/01009	. . Histidinol-phosphate transaminase (2.6.1.9)
205/01074	. . 1,4-Dihydroxy-2-naphthoate polyprenyltransferase (2.5.1.74)	206/01011	. . Acetylornithine transaminase (2.6.1.11)
205/01075	. . tRNA dimethylallyltransferase (2.5.1.75)	206/01012	. . Alanine--oxo-acid transaminase (2.6.1.12)
205/01076	. . Cysteate synthase (2.5.1.76)	206/01013	. . Ornithine aminotransferase (2.6.1.13)
205/01077	. . 7,8-Didemethyl-8-hydroxy-5-deazariboflavin synthase (2.5.1.77)	206/01014	. . Asparagine--oxo-acid transaminase (2.6.1.14)
205/01078	. . 6,7-Dimethyl-8-ribityllumazine synthase (2.5.1.78)	206/01015	. . Glutamine--pyruvate transaminase (2.6.1.15)
205/01079	. . Thermospermine synthase (2.5.1.79)	206/01016	. . Glutamine-fructose-6-phosphate transaminase (isomerizing) (2.6.1.16), i.e. glucosamine-6-phosphate-synthase
205/0108	. . 7-Dimethylallyltryptophan synthase (2.5.1.80)	206/01017	. . Succinyldiaminopimelate transaminase (2.6.1.17)
205/01081	. . Geranylarnesyl diphosphate synthase (2.5.1.81)	206/01018	. . Beta-alanine-pyruvate transaminase (2.6.1.18)
205/01082	. . Hexaprenyl diphosphate synthase (geranylgeranyl-diphosphate specific)(2.5.1.82)	206/01019	. . 4-Aminobutyrate—2-oxoglutarate transaminase (2.6.1.19)
205/01083	. . Hexaprenyl-diphosphate synthase ((2E,6E)-farnesyl-diphosphate specific)(2.5.1.83)	206/01021	. . D-Amino-acid transaminase (2.6.1.21), i.e. D-alanine aminotransferase/transaminase or D-aspartic aminotransferase/transaminase
205/01084	. . All-trans-nonaprenyl-diphosphate synthase (geranyl-diphosphate specific)(2.5.1.84)	206/01022	. . (S)-3-Amino-2-methylpropionate transaminase (2.6.1.22)
205/01085	. . All-trans-nonaprenyl-diphosphate synthase (geranylgeranyl-diphosphate specific)(2.5.1.85)	206/01023	. . 4-Hydroxyglutamate transaminase (2.6.1.23)
205/01086	. . Trans, polycis-decaprenyl diphosphate synthase (2.5.1.86)	206/01024	. . Diiodotyrosine transaminase (2.6.1.24)
205/01087	. . Ditrans, polycis-polyprenyl diphosphate synthase ((2E,6E)-farnesyl diphosphate specific)(2.5.1.87)	206/01026	. . Thyroid-hormone transaminase (2.6.1.26)
205/01088	. . Trans, polycis-polyprenyl diphosphate synthase ((2Z,6E)-farnesyl diphosphate specific)(2.5.1.88)	206/01027	. . Tryptophan transaminase (2.6.1.27)
205/01089	. . Tritrans, polycis-undecaprenyl-diphosphate synthase (geranylgeranyl-diphosphate specific) (2.5.1.89)	206/01028	. . Tryptophan--phenylpyruvate transaminase (2.6.1.28)
205/0109	. . All-trans-octaprenyl-diphosphate synthase (2.5.1.90)	206/01029	. . Diamine transaminase (2.6.1.29)
205/01091	. . All-trans-decaprenyl-diphosphate synthase (2.5.1.91)	206/0103	. . Pyridoxamine--pyruvate transaminase (2.6.1.30)
205/01092	. . (2Z,6Z)-Farnesyl diphosphate synthase (2.5.1.92)	206/01031	. . Pyridoxamine--oxaloacetate transaminase (2.6.1.31)
205/01093	. . 4-Hydroxybenzoate geranyltransferase (2.5.1.93)	206/01032	. . Valine--3-methyl-2-oxovalerate transaminase (2.6.1.32)
205/01094	. . Adenosyl-chloride synthase (2.5.1.94)	206/01033	. . dTDP-4-amino-4,6-dideoxy-D-glucose transaminase (2.6.1.33)
205/01095	. . Xanthan ketal pyruvate transferase (2.5.1.95)	206/01034	. . UDP-2-acetamido-4-amino-2,4,6-trideoxyglucose transaminase (2.6.1.34)
205/01096	. . 4,4'-diapophytoene synthase (2.5.1.96)	206/01035	. . Glycine--oxaloacetate transaminase (2.6.1.35)
205/01097	. . Pseudaminic acid synthase (2.5.1.97)	206/01036	. . L-Lysine 6-transaminase (2.6.1.36)
205/01098	. . Rhizobium leguminosarum exopolysaccharide glucosyl ketal-pyruvate-transferase (2.5.1.98)	206/01037	. . 2-Aminoethylphosphonate--pyruvate transaminase (2.6.1.37)
205/01099	. . All-trans-phytoene synthase (2.5.1.99)	206/01038	. . Histidine transaminase (2.6.1.38)
205/011	. . Fumigaclavine A dimethylallyltransferase (2.5.1.100)	206/01039	. . 2-Aminoadipate transaminase (2.6.1.39)
205/01101	. . N,N'-Diacetyllegionaminatase synthase (2.5.1.101)	206/0104	. . (R)-3-Amino-2-methylpropionate--pyruvate transaminase (2.6.1.40)
205/01102	. . Geranyl-pyrophosphate—olivetolic acid geranyltransferase (2.5.1.102)	206/01041	. . D-Methionine--pyruvate transaminase (2.6.1.41)
205/01103	. . Presqualene diphosphate synthase (2.5.1.103)	206/01042	. . Branched-chain-amino-acid transaminase (2.6.1.42)
		206/01043	. . Aminolevulinate transaminase (2.6.1.43)
		206/01044	. . Alanine--glyoxylate transaminase (2.6.1.44)
		206/01045	. . Serine--glyoxylate transaminase (2.6.1.45)
		206/01046	. . Diaminobutyrate--pyruvate transaminase (2.6.1.46)
		206/01047	. . Alanine--oxomalonnate transaminase (2.6.1.47)



206/01048	. . 5-Aminovalerate transaminase (2.6.1.48)	206/01097	. . Archaeosine synthase (2.6.1.97)
206/01049	. . Dihydroxyphenylalanine transaminase (2.6.1.49)	206/01098	. . UDP-2-acetamido-2-deoxy-ribo-hexuluronate aminotransferase (2.6.1.98)
206/0105	. . Glutamine--scyllo-inositol transaminase (2.6.1.50)	206/01099	. . L-Tryptophan—pyruvate aminotransferase (2.6.1.99)
206/01051	. . Serine--pyruvate transaminase (2.6.1.51)	206/03	. Oximinotransferases (2.6.3)
206/01052	. . Phosphoserine transaminase (2.6.1.52)	206/03001	. . Oximinotransferase (2.6.3.1)
206/01054	. . Pyridoxamine-phosphate transaminase (2.6.1.54)	206/99	. transferring other nitrogenous groups (2.6.99)
206/01055	. . Taurine--2-oxoglutarate transaminase (2.6.1.55)	206/99001	. . dATP(dGTP)--DNA purinetransferase (2.6.99.1)
206/01056	. . 1D-1-Guanidino-3-amino-1,3-dideoxy-scyllo-inositol transaminase (2.6.1.56)	206/99002	. . Pyridoxine 5'-phosphate synthase (2.6.99.2)
206/01057	. . Aromatic-amino-acid transaminase (2.6.1.57)	<b>207/00</b>	<b>Transferases transferring phosphorus-containing groups (2.7)</b>
206/01058	. . Phenylalanine(histidine) transaminase (2.6.1.58)	207/01	. Phosphotransferases with an alcohol group as acceptor (2.7.1)
206/01059	. . dTDP-4-amino-4,6-dideoxygalactose transaminase (2.6.1.59)	207/01001	. . Hexokinase (2.7.1.1)
206/0106	. . Aromatic-amino-acid--glyoxylate transaminase (2.6.1.60)	207/01002	. . Glucokinase (2.7.1.2)
206/01062	. . Adenosylmethionine--8-amino-7-oxononanoate transaminase (2.6.1.62)	207/01003	. . Ketohexokinase (2.7.1.3)
206/01063	. . Kynurenine--glyoxylate transaminase (2.6.1.63)	207/01004	. . Fructokinase (2.7.1.4)
206/01064	. . Glutamine-phenylpyruvate transaminase (2.6.1.64)	207/01005	. . Rhamnulokinase (2.7.1.5)
206/01065	. . N6-Acetyl-beta-lysine transaminase (2.6.1.65)	207/01006	. . Galactokinase (2.7.1.6)
206/01066	. . Valine--pyruvate transaminase (2.6.1.66)	207/01007	. . Mannokinase (2.7.1.7)
206/01067	. . 2-Aminohexanoate transaminase (2.6.1.67)	207/01008	. . Glucosamine kinase (2.7.1.8)
206/01068	. . Ornithine(lysine) transaminase (2.6.1.68)	207/0101	. . Phosphoglucokinase (2.7.1.10)
206/0107	. . Aspartate--phenylpyruvate transaminase (2.6.1.70)	207/01011	. . 6-Phosphofructokinase (2.7.1.11)
206/01071	. . Lysine--pyruvate 6-transaminase (2.6.1.71)	207/01012	. . Gluconokinase (2.7.1.12)
206/01072	. . D-4-Hydroxyphenylglycine transaminase (2.6.1.72)	207/01013	. . Dehydrogluconokinase (2.7.1.13)
206/01073	. . Methionine--glyoxylate transaminase (2.6.1.73)	207/01014	. . Sedoheptulokinase (2.7.1.14)
206/01074	. . Cephalosporin-C transaminase (2.6.1.74)	207/01015	. . Ribokinase (2.7.1.15)
206/01075	. . Cysteine-conjugate transaminase (2.6.1.75)	207/01016	. . Ribulokinase (2.7.1.16)
206/01076	. . Diaminobutyrate--2-oxoglutarate transaminase (2.6.1.76)	207/01017	. . Xylulokinase (2.7.1.17)
206/01077	. . Taurine--pyruvate aminotransferase (2.6.1.77)	207/01018	. . Phosphoribokinase (2.7.1.18)
206/01078	. . Aspartate--prephenate aminotransferase (2.6.1.78)	207/01019	. . Phosphoribulokinase (2.7.1.19)
206/01079	. . Glutamate--prephenate aminotransferase (2.6.1.79)	207/0102	. . Adenosine kinase (2.7.1.20)
206/0108	. . Nicotianamine aminotransferase (2.6.1.80)	207/01021	. . Thymidine kinase (2.7.1.21)
206/01081	. . Succinylornithine transaminase (2.6.1.81)	207/01022	. . Ribosylnicotinamide kinase (2.7.1.22)
206/01082	. . Putrescine aminotransferase (2.6.1.82)	207/01023	. . NAD <sup>+</sup> kinase (2.7.1.23)
206/01083	. . LL-Diaminopimelate aminotransferase (2.6.1.83)	207/01024	. . Dephospho-CoA kinase (2.7.1.24)
206/01084	. . Arginine--pyruvate transaminase (2.6.1.84)	207/01025	. . Adenylyl-sulfate kinase (2.7.1.25)
206/01085	. . Aminodeoxychorismate synthase (2.6.1.85)	207/01026	. . Riboflavin kinase (2.7.1.26)
206/01086	. . 2-Amino-4-deoxychorismate synthase (2.6.1.86)	207/01027	. . Erythritol kinase (2.7.1.27)
206/01087	. . UDP-4-amino-4-deoxy-L-arabinose aminotransferase (2.6.1.87)	207/01028	. . Triokinase (2.7.1.28)
206/01088	. . Methionine transaminase (2.6.1.88)	207/01029	. . Glycerone kinase (2.7.1.29), i.e. dihydroxyacetone kinase
206/01089	. . dTDP-3-amino-3,6-dideoxy-alpha-D-glucopyranose transaminase (2.6.1.89)	207/0103	. . Glycerol kinase (2.7.1.30)
206/0109	. . dTDP-3-amino-3,6-dideoxy-alpha-D-galactopyranose transaminase (2.6.1.90)	207/01031	. . Glycerate kinase (2.7.1.31)
206/01091	. . UDP-4-amino-4,6-dideoxy-alpha-D-N-acetyl-D-glucosamine transaminase (2.6.1.91)	207/01032	. . Choline kinase (2.7.1.32)
206/01092	. . UDP-4-amino-4,6-dideoxy-L-N-acetyl-beta-L-altrosamine transaminase (2.6.1.92)	207/01033	. . Pantothenate kinase (2.7.1.33)
206/01093	. . Neamine transaminase (2.6.1.93)	207/01034	. . Pantetheine kinase (2.7.1.34)
206/01094	. . 2'-Deamino-2'-hydroxyneamine transaminase (2.6.1.94)	207/01035	. . Pyridoxal kinase (2.7.1.35)
206/01095	. . Neomycin C transaminase (2.6.1.95)	207/01036	. . Mevalonate kinase (2.7.1.36)
206/01096	. . 4-Aminobutyrate—pyruvate transaminase (2.6.1.96)	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)
		207/01039	. . Homoserine kinase (2.7.1.39)
		207/0104	. . Pyruvate kinase (2.7.1.40)
		207/01041	. . Glucose-1-phosphate phosphodismutase (2.7.1.41)
		207/01042	. . Riboflavin phosphotransferase (2.7.1.42)
		207/01043	. . Glucuronokinase (2.7.1.43)



207/01044	. . Galacturonokinase (2.7.1.44)	207/01102	. . Hamamelose kinase (2.7.1.102)
207/01045	. . 2-Dehydro-3-deoxygluconokinase (2.7.1.45)	207/01103	. . Viomycin kinase (2.7.1.103)
207/01046	. . L-Arabinokinase (2.7.1.46)	207/01105	. . 6-Phosphofructo-2-kinase (2.7.1.105)
207/01047	. . D-Ribulokinase (2.7.1.47)	207/01106	. . Glucose-1,6-bisphosphate synthase (2.7.1.106)
207/01048	. . Uridine kinase (2.7.1.48)	207/01107	. . Diacylglycerol kinase (2.7.1.107)
207/01049	. . Hydroxymethylpyrimidine kinase (2.7.1.49)	207/01108	. . Dolichol kinase (2.7.1.108)
207/0105	. . Hydroxyethylthiazole kinase (2.7.1.50)	207/01112	. . Protein-tyrosine kinase (2.7.1.112) ( <a href="#">C12Y 207/10001</a> , <a href="#">C12Y 207/10002</a> take precedence)
207/01051	. . L-Fuculokinase (2.7.1.51)	207/01113	. . Deoxyguanosine kinase (2.7.1.113)
207/01052	. . Fucokinase (2.7.1.52)	207/01114	. . AMP--thymidine kinase (2.7.1.114)
207/01053	. . L-Xylulokinase (2.7.1.53)	207/01118	. . ADP--thymidine kinase (2.7.1.118)
207/01054	. . D-Arabinokinase (2.7.1.54)	207/01119	. . Hygromycin-B 7"-O-kinase (2.7.1.119)
207/01055	. . Allose kinase (2.7.1.55)	207/01121	. . Phosphoenolpyruvate--glycerone phosphotransferase (2.7.1.121)
207/01056	. . 1-Phosphofructokinase (2.7.1.56)	207/01122	. . Xylitol kinase (2.7.1.122)
207/01058	. . 2-Dehydro-3-deoxygalactonokinase (2.7.1.58)	207/01127	. . Inositol-trisphosphate 3-kinase (2.7.1.127)
207/01059	. . N-Acetylglucosamine kinase (2.7.1.59)	207/0113	. . Tetraacyldisaccharide 4'-kinase (2.7.1.130)
207/0106	. . N-Acylmannosamine kinase (2.7.1.60)	207/01134	. . Inositol-tetrakisphosphate 1-kinase (2.7.1.134)
207/01061	. . Acyl-phosphate--hexose phosphotransferase (2.7.1.61)	207/01136	. . Macrolide 2'-kinase (2.7.1.136)
207/01062	. . Phosphoramidate--hexose phosphotransferase (2.7.1.62)	207/01137	. . Phosphatidylinositol 3-kinase (2.7.1.137)
207/01063	. . Polyphosphate--glucose phosphotransferase (2.7.1.63)	207/01138	. . Ceramide kinase (2.7.1.138)
207/01064	. . Inositol 3-kinase (2.7.1.64)	207/0114	. . Inositol-tetrakisphosphate 5-kinase (2.7.1.140)
207/01065	. . Scyllo-inosamine 4-kinase (2.7.1.65)	207/01142	. . Glycerol-3-phosphate--glucose phosphotransferase (2.7.1.142)
207/01066	. . Undecaprenol kinase (2.7.1.66)	207/01143	. . Diphosphate-purine nucleoside kinase (2.7.1.143)
207/01067	. . 1-Phosphatidylinositol 4-kinase (2.7.1.67)	207/01144	. . Tagatose-6-phosphate kinase (2.7.1.144)
207/01068	. . 1-Phosphatidylinositol-4-phosphate 5-kinase (2.7.1.68)	207/01145	. . Deoxynucleoside kinase (2.7.1.145)
207/01069	. . Protein-Npi-phosphohistidine-sugar phosphotransferase (2.7.1.69), i.e. sucrose phosphotransferase system II	207/01146	. . ADP-specific phosphofructokinase (2.7.1.146)
207/01071	. . Shikimate kinase (2.7.1.71)	207/01147	. . ADP-specific glucokinase (2.7.1.147)
207/01072	. . Streptomycin 6-kinase (2.7.1.72)	207/01148	. . 4-(Cytidine 5'-diphospho)-2-C-methyl-D-erythritol kinase (2.7.1.148)
207/01073	. . Inosine kinase (2.7.1.73)	207/01149	. . 1-Phosphatidylinositol-5-phosphate 4-kinase (2.7.1.149)
207/01074	. . Deoxycytidine kinase (2.7.1.74)	207/0115	. . 1-Phosphatidylinositol-3-phosphate 5-kinase (2.7.1.150)
207/01076	. . Deoxyadenosine kinase (2.7.1.76)	207/01151	. . Inositol-polyphosphate multikinase (2.7.1.151)
207/01077	. . Nucleoside phosphotransferase (2.7.1.77)	207/01153	. . Phosphatidylinositol-4,5-bisphosphate 3-kinase (2.7.1.153), i.e. phosphoinositide 3-kinase
207/01078	. . Polynucleotide 5'-hydroxyl-kinase (2.7.1.78)	207/01154	. . Phosphatidylinositol-4-phosphate 3-kinase (2.7.1.154)
207/01079	. . Diphosphate--glycerol phosphotransferase (2.7.1.79)	207/01156	. . Adenosylcobinamide kinase (2.7.1.156)
207/0108	. . Diphosphate--serine phosphotransferase (2.7.1.80)	207/01157	. . N-Acetylgalactosamine kinase (2.7.1.157)
207/01081	. . Hydroxylysine kinase (2.7.1.81)	207/01158	. . Inositol-pentakisphosphate 2-kinase (2.7.1.158)
207/01082	. . Ethanolamine kinase (2.7.1.82)	207/01159	. . Inositol-1,3,4-trisphosphate 5/6-kinase (2.7.1.159)
207/01083	. . Pseudouridine kinase (2.7.1.83)	207/0116	. . 2'-Phosphotransferase (2.7.1.160)
207/01084	. . Alkylglycerone kinase (2.7.1.84)	207/01161	. . CTP-dependent riboflavin kinase (2.7.1.161)
207/01085	. . Beta-glucoside kinase (2.7.1.85)	207/01162	. . N-Acetylhexosamine 1-kinase (2.7.1.162)
207/01086	. . NADH kinase (2.7.1.86)	207/01163	. . Hygromycin B 4-O-kinase (2.7.1.163)
207/01087	. . Streptomycin 3"-kinase (2.7.1.87)	207/01164	. . O-Phosphoseryl-tRNA(Sec) kinase (2.7.1.164)
207/01088	. . Dihydrostreptomycin-6-phosphate 3'-alpha-kinase (2.7.1.88)	207/01165	. . Glycerate 2-kinase (2.7.1.165)
207/01089	. . Thiamine kinase (2.7.1.89)	207/01166	. . 3-Deoxy-D-manno-octulosonic acid kinase (2.7.1.166)
207/0109	. . Diphosphate--fructose-6-phosphate 1-phosphotransferase (2.7.1.90)	207/01167	. . D-Glycero-beta-D-manno-heptose-7-phosphate kinase (2.7.1.167)
207/01091	. . Sphinganine kinase (2.7.1.91)	207/01168	. . D-Glycero-alpha-D-manno-heptose-7-phosphate kinase (2.7.1.168)
207/01092	. . 5-Dehydro-2-deoxygluconokinase (2.7.1.92)	207/01169	. . Pantoate kinase (2.7.1.169)
207/01093	. . Alkylglycerol kinase (2.7.1.93)	207/0117	. . Anhydro-N-acetylmuramic acid kinase (2.7.1.170)
207/01094	. . Acylglycerol kinase (2.7.1.94)	207/01171	. . Protein-fructosamine 3-kinase (2.7.1.171)
207/01095	. . Kanamycin kinase (2.7.1.95), i.e. neomycin-kanamycin phosphotransferase	207/01172	. . Protein-ribulosamine 3-kinase (2.7.1.172)
207/011	. . S-Methyl-5-thioribose kinase (2.7.1.100)		
207/01101	. . Tagatose kinase (2.7.1.101)		

207/01173	. . Nicotinate riboside kinase (2.7.1.173)	207/04023	. . Ribose 1,5-bisphosphate phosphokinase (2.7.4.23)
207/01174	. . Diacylglycerol kinase (CTP dependent) (2.7.1.174)	207/04024	. . Diphosphoinositol-pentakisphosphate kinase (2.7.4.24)
207/01175	. . Maltokinase (2.7.1.175)	207/04025	. . (d)CMP kinase (2.7.4.25)
207/01176	. . UDP-N-acetylglucosamine kinase (2.7.1.176)	207/04026	. . Isopentenyl phosphate kinase (2.7.4.26)
207/01177	. . L-Threonine kinase (2.7.1.177)	207/04027	. . [Pyruvate, phosphate dikinase]-phosphate phosphotransferase (2.7.4.27)
207/02	. Phosphotransferases with a carboxy group as acceptor (2.7.2)	207/04028	. . [Pyruvate, water dikinase]-phosphate phosphotransferase (2.7.4.28)
207/02001	. . Acetate kinase (2.7.2.1)	207/06	. Diphosphotransferases (2.7.6)
207/02002	. . Carbamate kinase (2.7.2.2)	207/06001	. . Ribose-phosphate diphosphokinase (2.7.6.1)
207/02003	. . Phosphoglycerate kinase (2.7.2.3)	207/06002	. . Thiamine diphosphokinase (2.7.6.2)
207/02004	. . Aspartate kinase (2.7.2.4)	207/06003	. . 2-Amino-4-hydroxy-6-hydroxymethyldihydropteridine diphosphokinase (2.7.6.3)
207/02006	. . Formate kinase (2.7.2.6)	207/06004	. . Nucleotide diphosphokinase (2.7.6.4)
207/02007	. . Butyrate kinase (2.7.2.7)	207/06005	. . GTP diphosphokinase (2.7.6.5)
207/02008	. . Acetylglutamate kinase (2.7.2.8)	207/07	. Nucleotidyltransferases (2.7.7)
207/0201	. . Phosphoglycerate kinase (GTP) (2.7.2.10)	207/07001	. . Nicotinamide-nucleotide adenyllyltransferase (2.7.7.1)
207/02011	. . Glutamate 5-kinase (2.7.2.11)	207/07002	. . FAD synthetase (2.7.7.2)
207/02012	. . Acetate kinase (diphosphate) (2.7.2.12)	207/07003	. . Pantetheine-phosphate adenyllyltransferase (2.7.7.3)
207/02013	. . Glutamate 1-kinase (2.7.2.13)	207/07004	. . Sulfate adenyllyltransferase (2.7.7.4)
207/02014	. . Branched-chain-fatty-acid kinase (2.7.2.14)	207/07005	. . Sulfate adenyllyltransferase (ADP) (2.7.7.5)
207/02015	. . Propionate kinase (2.7.2.15)	207/07006	. . DNA-directed RNA polymerase (2.7.7.6)
207/03	. Phosphotransferases with a nitrogenous group as acceptor (2.7.3)	207/07007	. . DNA-directed DNA polymerase (2.7.7.7), i.e. DNA replicase
207/03001	. . Guanidinoacetate kinase (2.7.3.1)	207/07008	. . Polyribonucleotide nucleotidyltransferase (2.7.7.8), i.e. polynucleotide phosphorylase
207/03002	. . Creatine kinase (2.7.3.2)	207/07009	. . UTP-glucose-1-phosphate uridylyltransferase (2.7.7.9), i.e. UDP-glucose-pyrophosphorylase
207/03003	. . Arginine kinase (2.7.3.3)	207/0701	. . UTP--hexose-1-phosphate uridylyltransferase (2.7.7.10)
207/03004	. . Taurocyamine kinase (2.7.3.4)	207/07011	. . UTP--xylose-1-phosphate uridylyltransferase (2.7.7.11)
207/03005	. . Lombricine kinase (2.7.3.5)	207/07012	. . UDP-glucose--hexose-1-phosphate uridylyltransferase (2.7.7.12)
207/03006	. . Hypotaurocyamine kinase (2.7.3.6)	207/07013	. . Mannose-1-phosphate guanylyltransferase (2.7.7.13)
207/03007	. . Opheline kinase (2.7.3.7)	207/07014	. . Ethanolamine-phosphate cytidyltransferase (2.7.7.14)
207/03008	. . Ammonia kinase (2.7.3.8)	207/07015	. . Choline-phosphate cytidyltransferase (2.7.7.15)
207/03009	. . Phosphoenolpyruvate-protein phosphotransferase (2.7.3.9)	207/07018	. . Nicotinate-nucleotide adenyllyltransferase (2.7.7.18)
207/0301	. . Agmatine kinase (2.7.3.10)	207/07019	. . Polynucleotide adenyllyltransferase (2.7.7.19)
207/04	. Phosphotransferases with a phosphate group as acceptor (2.7.4)	207/07022	. . Mannose-1-phosphate guanylyltransferase (GDP) (2.7.7.22)
207/04001	. . Polyphosphate kinase (2.7.4.1)	207/07023	. . UDP-N-acetylglucosamine diphosphorylase (2.7.7.23)
207/04002	. . Phosphomevalonate kinase (2.7.4.2)	207/07024	. . Glucose-1-phosphate thymidyltransferase (2.7.7.24)
207/04003	. . Adenylate kinase (2.7.4.3)	207/07027	. . Glucose-1-phosphate adenyllyltransferase (2.7.7.27), i.e. ADP-glucose pyrophosphorylase
207/04004	. . Nucleoside-phosphate kinase (2.7.4.4)	207/07028	. . Nucleoside-triphosphate-aldose-1-phosphate nucleotidyltransferase (2.7.7.28)
207/04006	. . Nucleoside-diphosphate kinase (2.7.4.6)	207/0703	. . Fucose-1-phosphate guanylyltransferase (2.7.7.30)
207/04007	. . Phosphomethylpyrimidine kinase (2.7.4.7)	207/07031	. . DNA nucleotidylexotransferase (2.7.7.31), i.e. terminal deoxynucleotidyl transferase
207/04008	. . Guanylate kinase (2.7.4.8)	207/07032	. . Galactose-1-phosphate thymidyltransferase (2.7.7.32)
207/04009	. . dTMP kinase (2.7.4.9)		
207/0401	. . Nucleoside-triphosphate--adenylate kinase (2.7.4.10)		
207/04011	. . (Deoxy)adenylate kinase (2.7.4.11)		
207/04012	. . T(2)-Induced deoxynucleotide kinase (2.7.4.12)		
207/04013	. . (Deoxy)nucleoside-phosphate kinase (2.7.4.13)		
207/04014	. . UMP/CMP kinase (2.7.4.14), i.e. uridine monophosphate kinase		
207/04015	. . Thiamine-diphosphate kinase (2.7.4.15)		
207/04016	. . Thiamine-phosphate kinase (2.7.4.16)		
207/04017	. . 3-Phosphoglyceroyl-phosphate--polyphosphate phosphotransferase (2.7.4.17)		
207/04018	. . Farnesyl-diphosphate kinase (2.7.4.18)		
207/04019	. . 5-Methyldeoxycytidine-5'-phosphate kinase (2.7.4.19)		
207/0402	. . Dolichyl-diphosphate--polyphosphate phosphotransferase (2.7.4.20)		
207/04021	. . Inositol-hexakisphosphate kinase (2.7.4.21)		
207/04022	. . UMP kinase (2.7.4.22)		

207/07033	. . Glucose-1-phosphate cytidyltransferase (2.7.7.33)	207/07071	. . D-Glycero-alpha-D-manno-heptose 1-phosphate guanylyltransferase (2.7.7.71)
207/07034	. . Glucose-1-phosphate guanylyltransferase (2.7.7.34)	207/07072	. . CCA tRNA nucleotidyltransferase (2.7.7.72)
207/07035	. . Ribose-5-phosphate adenylyltransferase (2.7.7.35)	207/07073	. . Sulfur carrier protein ThiS adenylyltransferase (2.7.7.73)
207/07036	. . Aldose-1-phosphate adenylyltransferase (2.7.7.36)	207/07074	. . 1L-Myo-inositol 1-phosphate cytidyltransferase (2.7.7.74)
207/07037	. . Aldose-1-phosphate nucleotidyltransferase (2.7.7.37)	207/07075	. . Molybdopterin adenylyltransferase (2.7.7.75)
207/07038	. . 3-Deoxy-manno-octulosonate cytidyltransferase (2.7.7.38)	207/07076	. . Molybdenum cofactor cytidyltransferase (2.7.7.76)
207/07039	. . Glycerol-3-phosphate cytidyltransferase (2.7.7.39)	207/07077	. . Molybdenum cofactor guanylyltransferase (2.7.7.77)
207/0704	. . D-Ribitol-5-phosphate cytidyltransferase (2.7.7.40)	207/07078	. . GDP-D-glucose phosphorylase (2.7.7.78)
207/07041	. . Phosphatidate cytidyltransferase (2.7.7.41), i.e. CDP-diacylglycerol synthase	207/07079	. . tRNA(His) guanylyltransferase (2.7.7.79)
207/07042	. . [Glutamate--ammonia-ligase] adenylyltransferase (2.7.7.42)	207/0708	. . Molybdopterin-synthase adenylyltransferase (2.7.7.80)
207/07043	. . N-Acylneuraminate cytidyltransferase (2.7.7.43)	207/07081	. . Pseudaminic acid cytidyltransferase (2.7.7.81)
207/07044	. . Glucuronate-1-phosphate uridylyltransferase (2.7.7.44)	207/07082	. . CMP-N,N'-diacetylglutamic acid synthase (2.7.7.82)
207/07045	. . Guanosine-triphosphate guanylyltransferase (2.7.7.45)	207/07083	. . UDP-N-acetylgalactosamine diphosphorylase (2.7.7.83)
207/07046	. . Gentamicin 2"-nucleotidyltransferase (2.7.7.46)	207/08	. . Transferases for other substituted phosphate groups (2.7.8)
207/07047	. . Streptomycin 3"-adenylyltransferase (2.7.7.47)	207/08001	. . Ethanolaminephosphotransferase (2.7.8.1)
207/07048	. . RNA-directed RNA polymerase (2.7.7.48), i.e. RNA replicase	207/08002	. . Diacylglycerol cholinephosphotransferase (2.7.8.2)
207/07049	. . RNA-directed DNA polymerase (2.7.7.49), i.e. telomerase or reverse-transcriptase	207/08003	. . Ceramide cholinephosphotransferase (2.7.8.3)
207/0705	. . mRNA guanylyltransferase (2.7.7.50)	207/08004	. . Serine-phosphoethanolamine synthase (2.7.8.4)
207/07051	. . Adenylylsulfate--ammonia adenylyltransferase (2.7.7.51)	207/08005	. . CDP-diacylglycerol-glycerol-3-phosphate 3-phosphatidyltransferase (2.7.8.5)
207/07052	. . RNA uridylyltransferase (2.7.7.52)	207/08006	. . Undecaprenyl-phosphate galactose phosphotransferase (2.7.8.6)
207/07053	. . ATP adenylyltransferase (2.7.7.53)	207/08007	. . Holo-[acyl-carrier-protein] synthase (2.7.8.7)
207/07054	. . Phenylalanine adenylyltransferase (2.7.7.54)	207/08008	. . CDP-diacylglycerol--serine O-phosphatidyltransferase (2.7.8.8)
207/07055	. . Anthranilate adenylyltransferase (2.7.7.55)	207/08009	. . Phosphomannan mannosephosphotransferase (2.7.8.9)
207/07056	. . tRNA nucleotidyltransferase (2.7.7.56)	207/0801	. . Sphingosine cholinephosphotransferase (2.7.8.10)
207/07057	. . N-Methylphosphoethanolamine cytidyltransferase (2.7.7.57)	207/08011	. . CDP-diacylglycerol--inositol 3-phosphatidyltransferase (2.7.8.11)
207/07058	. . (2,3-Dihydroxybenzoyl)adenylate synthase (2.7.7.58)	207/08012	. . CDP-glycerol glycerophosphotransferase (2.7.8.12)
207/07059	. . [Protein-PII] uridylyltransferase (2.7.7.59)	207/08013	. . Phospho-N-acetylmuramoyl-pentapeptide-transferase (2.7.8.13)
207/0706	. . 2-C-Methyl-D-erythritol 4-phosphate cytidyltransferase (2.7.7.60)	207/08014	. . CDP-ribitol ribitolphosphotransferase (2.7.8.14)
207/07061	. . Citrate lyase holo-[acyl-carrier-protein] synthase (2.7.7.61)	207/08015	. . UDP-N-acetylglucosamine--dolichyl-phosphate N-acetylglucosaminephosphotransferase (2.7.8.15)
207/07062	. . Adenosylcobinamide-phosphate guanylyltransferase (2.7.7.62)	207/08017	. . UDP-N-acetylglucosamine--lysosomal-enzyme N-acetylglucosaminephosphotransferase (2.7.8.17)
207/07063	. . Lipoate--protein ligase (2.7.7.63)	207/08018	. . UDP-galactose--UDP-N-acetylglucosamine galactose phosphotransferase (2.7.8.18)
207/07064	. . UTP-monosaccharide-1-phosphate uridylyltransferase (2.7.7.64)	207/08019	. . UDP-glucose--glycoprotein glucose phosphotransferase (2.7.8.19)
207/07065	. . Diguanylate cyclase (2.7.7.65)	207/0802	. . Phosphatidylglycerol--membrane-oligosaccharide glycerophosphotransferase (2.7.8.20)
207/07066	. . Malonate decarboxylase holo-[acyl-carrier-protein] synthase (2.7.7.66)	207/08021	. . Membrane-oligosaccharide glycerophosphotransferase (2.7.8.21)
207/07067	. . CDP-archaeol synthase (2.7.7.67)	207/08022	. . 1-Alkenyl-2-acylglycerol choline phosphotransferase (2.7.8.22)
207/07068	. . 2-Phospho-L-lactate guanylyltransferase (2.7.7.68)	207/08023	. . Carboxyvinyl-carboxyphosphonate phosphorylmutase (2.7.8.23)
207/07069	. . GDP-L-galactose phosphorylase (2.7.7.69)	207/08024	. . Phosphatidylcholine synthase (2.7.8.24)
207/0707	. . D-Glycero-beta-D-manno-heptose 1-phosphate adenylyltransferase (2.7.7.70)		

207/08025	. . Triphosphoribosyl-dephospho-CoA synthase (2.7.8.25)	207/11019	. . Phosphorylase kinase (2.7.11.19)
207/08026	. . Adenosylcobinamide-GDP ribazoletransferase (2.7.8.26)	207/1102	. . Elongation factor 2 kinase (2.7.11.20), i.e. eEF-2K
207/08027	. . Sphingomyelin synthase (2.7.8.27)	207/11021	. . Polo kinase (2.7.11.21)
207/08028	. . 2-Phospho-L-lactate transferase (2.7.8.28)	207/11022	. . Cyclin-dependent kinase (2.7.11.22)
207/08029	. . L-Serine-phosphatidylethanolamine phosphatidyltransferase (2.7.8.29)	207/11023	. . [RNA-polymerase-subunit] kinase (2.7.11.23)
207/0803	. . Undecaprenyl-phosphate 4-deoxy-4-formamido-L-arabinose transferase (2.7.8.30)	207/11024	. . Mitogen-activated protein kinase (2.7.11.24), i.e. MAPK or MAPK2 or c-Jun N-terminal kinase
207/08031	. . Undecaprenyl-phosphate glucose phosphotransferase (2.7.8.31)	207/11025	. . Mitogen-activated protein kinase kinase kinase (2.7.11.25), i.e. MAPKKK or MAP3K
207/08032	. . 3-O-Alpha-D-mannopyranosyl-alpha-D-mannopyranose xylosylphosphotransferase (2.7.8.32)	207/11026	. . Tau-protein kinase (2.7.11.26)
207/08033	. . UDP-GlcNAc:undecaprenyl-phosphate GlcNAc-1-phosphate transferase (2.7.8.33)	207/11027	. . [Acetyl-CoA carboxylase] kinase (2.7.11.27)
207/08034	. . CDP-L-myo-inositol myo-inositolphosphotransferase (2.7.8.34)	207/11028	. . Tropomyosin kinase (2.7.11.28)
207/08035	. . UDP-N-acetylglucosamine—decaprenyl-phosphate N-acetylglucosaminophosphotransferase (2.7.8.35)	207/11029	. . [Low-density-lipoprotein receptor] kinase (2.7.11.29)
207/08036	. . Undecaprenyl phosphate N,N'-diacetyl bacillosamine 1-phosphate transferase (2.7.8.36)	207/1103	. . Receptor protein serine/threonine kinase (2.7.11.30)
207/08037	. . Alpha-D-ribose 1-methylphosphonate 5-triphosphate synthase (2.7.8.37)	207/11031	. . [Hydroxymethylglutaryl-CoA reductase (NADPH)] kinase (2.7.11.31)
207/09	. . Phosphotransferases with paired acceptors (2.7.9)	207/11032	. . [Pyruvate, phosphate dikinase] kinase (2.7.11.32)
207/09001	. . Pyruvate, phosphate dikinase (2.7.9.1)	207/11033	. . [Pyruvate, water dikinase] kinase (2.7.11.33)
207/09002	. . Pyruvate, water dikinase (2.7.9.2)	207/12	. . Dual-specificity kinases (2.7.12)
207/09003	. . Selenide, water dikinase (2.7.9.3), i.e. selenophosphate-synthase	207/12001	. . Dual-specificity kinase (2.7.12.1)
207/09004	. . Alpha-glucan, water dikinase (2.7.9.4)	207/12002	. . Mitogen-activated protein kinase kinase (2.7.12.2), i.e. MAPKK or MEK1 or MEK2
207/09005	. . Phosphoglucan, water dikinase (2.7.9.5)	207/13	. . Protein-histidine kinases (2.7.13)
207/10	. . Protein-tyrosine kinases (2.7.10)	207/13001	. . Protein-histidine pros-kinase (2.7.13.1)
207/10001	. . Receptor protein-tyrosine kinase (2.7.10.1)	207/13002	. . Protein-histidine tele-kinase (2.7.13.2)
207/10002	. . Non-specific protein-tyrosine kinase (2.7.10.2), i.e. spleen tyrosine kinase	207/13003	. . Histidine kinase (2.7.13.3)
207/11	. . Protein-serine/threonine kinases (2.7.11)	207/99	. . Other protein kinases (2.7.99)
207/11001	. . Non-specific serine/threonine protein kinase (2.7.11.1), i.e. casein kinase or checkpoint kinase	207/99001	. . Triphosphate--protein phosphotransferase (2.7.99.1)
207/11002	. . [Pyruvate dehydrogenase (acetyl-transferring)] kinase (2.7.11.2)	<b>208/00</b>	<b>Transferases transferring sulfur-containing groups (2.8)</b>
207/11003	. . Dephospho-[reductase kinase] kinase (2.7.11.3)	208/01	. . Sulfurtransferases (2.8.1)
207/11004	. . [3-Methyl-2-oxobutanoate dehydrogenase (acetyl-transferring)] kinase (2.7.11.4)	208/01001	. . Thiosulfate sulfurtransferase (2.8.1.1)
207/11005	. . [Isocitrate dehydrogenase (NADP+)] kinase (2.7.11.5)	208/01002	. . 3-Mercaptopyruvate sulfurtransferase (2.8.1.2)
207/11006	. . [Tyrosine 3-monooxygenase] kinase (2.7.11.6)	208/01003	. . Thiosulfate--thiol sulfurtransferase (2.8.1.3)
207/11007	. . [Myosin-heavy-chain] kinase (2.7.11.7)	208/01004	. . tRNA sulfurtransferase (2.8.1.4)
207/11008	. . Fas-activated serine/threonine kinase (2.7.11.8)	208/01005	. . Thiosulfate--dithiol sulfurtransferase (2.8.1.5)
207/11009	. . Goodpasture-antigen-binding protein kinase (2.7.11.9)	208/01006	. . Biotin synthase (2.8.1.6)
207/1101	. . IkappaB kinase (2.7.11.10)	208/01007	. . Cysteine desulfurase (2.8.1.7)
207/11011	. . cAMP-dependent protein kinase (2.7.11.11)	208/01008	. . Lipoyl synthase (2.8.1.8)
207/11012	. . cGMP-dependent protein kinase (2.7.11.12)	208/01009	. . Molybdenum cofactor sulfurtransferase (2.8.1.9)
207/11013	. . Protein kinase C (2.7.11.13)	208/0101	. . Thiazole synthase (2.8.1.10)
207/11014	. . Rhodopsin kinase (2.7.11.14)	208/01011	. . Molybdopterin synthase sulfurtransferase (2.8.1.11)
207/11015	. . [Beta-adrenergic-receptor] kinase (2.7.11.15)	208/01012	. . Molybdopterin synthase (2.8.1.12)
207/11016	. . G-Protein-coupled receptor kinase (2.7.11.16)	208/02	. . Sulfotransferases (2.8.2)
207/11017	. . Ca <sup>2+</sup> /Calmodulin-dependent protein kinase (2.7.11.17)	208/02001	. . Aryl sulfotransferase (2.8.2.1)
207/11018	. . Myosin-light-chain kinase (2.7.11.18)	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)	210/01	. Molybdenumtransferases or tungstenttransferases with sulfide groups as acceptors (2.10.1)
208/02014	. . Bile-salt sulfotransferase (2.8.2.14)	210/01001	. . Molybdopterin molybdotransferase (2.10.1.1)
208/02015	. . Steroid sulfotransferase (2.8.2.15)	<b>301/00</b>	<b>Hydrolases acting on ester bonds (3.1)</b>
208/02016	. . Thiol sulfotransferase (2.8.2.16)	301/01	. Carboxylic ester hydrolases (3.1.1)
208/02017	. . Chondroitin 6-sulfotransferase (2.8.2.17)	301/01001	. . Carboxylesterase (3.1.1.1)
208/02018	. . Cortisol sulfotransferase (2.8.2.18)	301/01002	. . Arylesterase (3.1.1.2)
208/02019	. . Triglucoylalkylacylglycerol sulfotransferase (2.8.2.19)	301/01003	. . Triacylglycerol lipase (3.1.1.3)
208/0202	. . Protein-tyrosine sulfotransferase (2.8.2.20)	301/01004	. . Phospholipase A2 (3.1.1.4)
208/02021	. . Keratan sulfotransferase (2.8.2.21)	301/01005	. . Lysophospholipase (3.1.1.5)
208/02022	. . Aryl-sulfate sulfotransferase (2.8.2.22)	301/01006	. . Acetylesterase (3.1.1.6)
208/02023	. . [Heparan sulfate]-glucosamine 3-sulfotransferase 1 (2.8.2.23)	301/01007	. . Acetylcholinesterase (3.1.1.7)
208/02024	. . Desulfoglucosinolate sulfotransferase (2.8.2.24)	301/01008	. . Cholinesterase (3.1.1.8), i.e. butyrylcholine-esterase
208/02025	. . Flavonol 3-sulfotransferase (2.8.2.25)	301/0101	. . Tropinesterase (3.1.1.10)
208/02026	. . Quercetin-3-sulfate 3'-sulfotransferase (2.8.2.26)	301/01011	. . Pectinesterase (3.1.1.11)
208/02027	. . Quercetin-3-sulfate 4'-sulfotransferase (2.8.2.27)	301/01013	. . Sterol esterase (3.1.1.13)
208/02028	. . Quercetin-3,3'-bissulfate 7-sulfotransferase (2.8.2.28)	301/01014	. . Chlorophyllase (3.1.1.14)
208/02029	. . [Heparan sulfate]-glucosamine 3-sulfotransferase 2 (2.8.2.29)	301/01015	. . L-Arabinonolactonase (3.1.1.15)
208/0203	. . [Heparan sulfate]-glucosamine 3-sulfotransferase 3 (2.8.2.30)	301/01016	. . 4-Carboxymethyl-4-hydroxyisocrotonolactonase (3.1.1.16) ( <a href="#">C12Y 301/01024</a> , <a href="#">C12Y 503/03004</a> take precedence)
208/02031	. . Petromyzonol sulfotransferase (2.8.2.31)	301/01017	. . Gluconolactonase (3.1.1.17)
208/02032	. . Scymnol sulfotransferase (2.8.2.32)	301/01019	. . Uronolactonase (3.1.1.19)
208/02033	. . N-Acetylgalactosamine 4-sulfate 6-O-sulfotransferase (2.8.2.33)	301/0102	. . Tannase (3.1.1.20)
208/02034	. . Glycochenodeoxycholate sulfotransferase (2.8.2.34)	301/01021	. . Retinyl-palmitate esterase (3.1.1.21) ( <a href="#">C12Y 301/01001</a> , <a href="#">C12Y 301/01003</a> take precedence)
208/02035	. . Dermatan 4-sulfotransferase (2.8.2.35)	301/01022	. . Hydroxybutyrate-dimer hydrolase (3.1.1.22)
208/03	. CoA-transferases (2.8.3)	301/01023	. . Acylglycerol lipase (3.1.1.23)
208/03001	. . Propionate CoA-transferase (2.8.3.1)	301/01024	. . 3-Oxadipate enol-lactonase (3.1.1.24)
208/03002	. . Oxalate CoA-transferase (2.8.3.2)	301/01025	. . 1,4-Lactonase (3.1.1.25)
208/03003	. . Malonate CoA-transferase (2.8.3.3)	301/01026	. . Galactolipase (3.1.1.26)
208/03005	. . 3-Oxoacid CoA-transferase (2.8.3.5)	301/01027	. . 4-Pyridoxolactonase (3.1.1.27)
208/03006	. . 3-Oxadipate CoA-transferase (2.8.3.6)	301/01028	. . Acylcarnitine hydrolase (3.1.1.28)
208/03007	. . Succinate--citramalate CoA-transferase (2.8.3.7)	301/01029	. . Aminoacyl-tRNA hydrolase (3.1.1.29)
208/03008	. . Acetate CoA-transferase (2.8.3.8)	301/0103	. . D-Arabinonolactonase (3.1.1.30)
208/03009	. . Butyrate--acetoacetate CoA-transferase (2.8.3.9)	301/01031	. . 6-Phosphogluconolactonase (3.1.1.31)
208/0301	. . Citrate CoA-transferase (2.8.3.10)	301/01032	. . Phospholipase A1 (3.1.1.32)
208/03011	. . Citramalate CoA-transferase (2.8.3.11)	301/01033	. . 6-Acetylglucose deacetylase (3.1.1.33)
208/03012	. . Glutaconate CoA-transferase (2.8.3.12)	301/01034	. . Lipoprotein lipase (3.1.1.34)
208/03013	. . Succinate--hydroxymethylglutarate CoA-transferase (2.8.3.13)	301/01035	. . Dihydrocoumarin hydrolase (3.1.1.35)
208/03014	. . 5-Hydroxypentanoate CoA-transferase (2.8.3.14)	301/01036	. . Limonin-D-ring-lactonase (3.1.1.36)
208/03015	. . Succinyl-CoA:(R)-benzylsuccinate CoA-transferase (2.8.3.15)	301/01037	. . Steroid-lactonase (3.1.1.37)
208/03016	. . Formyl-CoA transferase (2.8.3.16)	301/01038	. . Triacetate-lactonase (3.1.1.38)
208/03017	. . Cinnamoyl-CoA:phenyllactate CoA-transferase (2.8.3.17)	301/01039	. . Actinomycin lactonase (3.1.1.39)
208/04	. transferring alkylthio groups (2.8.4)	301/0104	. . Orsellinate-depside hydrolase (3.1.1.40)
208/04001	. . Coenzyme-B sulfoethylthiotransferase (2.8.4.1)	301/01041	. . Cephalosporin-C deacetylase (3.1.1.41)
208/04002	. . Arsenate-mycothioli transferase (2.8.4.2)	301/01042	. . Chlorogenate hydrolase (3.1.1.42)
<b>209/00</b>	<b>Transferases transferring selenium-containing groups (2.9)</b>	301/01043	. . Alpha-amino-acid esterase (3.1.1.43)
209/01	. transferring selenium-containing groups (2.9.1)	301/01044	. . 4-Methyloxaloacetate esterase (3.1.1.44)
209/01001	. . L-Seryl-tRNA(Sec) selenium transferase (2.9.1.1)	301/01045	. . Carboxymethylenebutenolidase (3.1.1.45)
209/01002	. . O-Phospho-L-seryl-tRNA(Sec):L-selenocysteinyl-tRNA synthase (2.9.1.2)	301/01046	. . Deoxylimonate A-ring-lactonase (3.1.1.46)
<b>210/00</b>	<b>Transferases transferring molybdenum- or tungsten-containing groups (2.10)</b>	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-acetyltransferase (3.1.1.53)	301/02015	. . Ubiquitin thioesterase (3.1.2.15)
301/01054	. . Acetoxybutyrylbithiophene deacetylase (3.1.1.54)	301/02016	. . Citrate-lyase deacetylase (3.1.2.16)
301/01055	. . Acetylsalicylate deacetylase (3.1.1.55)	301/02017	. . (S)-Methylmalonyl-CoA hydrolase (3.1.2.17)
301/01056	. . Methylumbelliferyl-acetate deacetylase (3.1.1.56)	301/02018	. . ADP-dependent short-chain-acyl-CoA hydrolase (3.1.2.18)
301/01057	. . 2-Pyrone-4,6-dicarboxylate lactonase (3.1.1.57)	301/02019	. . ADP-dependent medium-chain-acyl-CoA hydrolase (3.1.2.19)
301/01058	. . N-Acetylgalactosaminoglycan deacetylase (3.1.1.58)	301/0202	. . Acyl-CoA hydrolase (3.1.2.20)
301/01059	. . Juvenile-hormone esterase (3.1.1.59)	301/02021	. . Dodecanoyl-[acyl-carrier-protein] hydrolase (3.1.2.21)
301/0106	. . Bis(2-ethylhexyl)phthalate esterase (3.1.1.60)	301/02022	. . Palmitoyl-protein hydrolase (3.1.2.22)
301/01061	. . Protein-glutamate methyltransferase (3.1.1.61)	301/02023	. . 4-Hydroxybenzoyl-CoA thioesterase (3.1.2.23)
301/01063	. . 11-Cis-retinyl-palmitate hydrolase (3.1.1.63)	301/02025	. . Phenylacetyl-CoA hydrolase (3.1.2.25)
301/01064	. . Retinoid isomerase (3.1.1.64)	301/02026	. . Bile-acid-CoA hydrolase (3.1.2.26)
301/01065	. . L-Rhamnono-1,4-lactonase (3.1.1.65)	301/02027	. . Choloyl-CoA hydrolase (3.1.2.27)
301/01066	. . 5-(3,4-Diacetoxybut-1-ynyl)-2,2'-bithiophene deacetylase (3.1.1.66)	301/02028	. . 1,4-Dihydroxy-2-naphthoyl-CoA hydrolase (3.1.2.28)
301/01067	. . Fatty-acyl-ethyl-ester synthase (3.1.1.67)	301/02029	. . Fluoroacetyl-CoA thioesterase (3.1.2.29)
301/01068	. . Xylono-1,4-lactonase (3.1.1.68)	301/03	. . Phosphoric monoester hydrolases (3.1.3)
301/0107	. . Cetraxate benzylesterase (3.1.1.70)	301/03001	. . Alkaline phosphatase (3.1.3.1)
301/01071	. . Acetylalkylglycerol acetylhydrolase (3.1.1.71)	301/03002	. . Acid phosphatase (3.1.3.2)
301/01072	. . Acetylxylose esterase (3.1.1.72)	301/03003	. . Phosphoserine phosphatase (3.1.3.3)
301/01073	. . Feruloyl esterase (3.1.1.73)	301/03004	. . Phosphatidate phosphatase (3.1.3.4)
301/01074	. . Cutinase (3.1.1.74)	301/03005	. . 5'-Nucleotidase (3.1.3.5)
301/01075	. . Poly(3-hydroxybutyrate) depolymerase (3.1.1.75)	301/03006	. . 3'-Nucleotidase (3.1.3.6)
301/01076	. . Poly(3-hydroxyoctanoate) depolymerase (3.1.1.76)	301/03007	. . 3'(2'),5'-Bisphosphate nucleotidase (3.1.3.7)
301/01077	. . Acyloxyacyl hydrolase (3.1.1.77)	301/03008	. . 3-Phytase (3.1.3.8)
301/01078	. . Polyneuridine-aldehyde esterase (3.1.1.78)	301/03009	. . Glucose-6-phosphatase (3.1.3.9)
301/01079	. . Hormone-sensitive lipase (3.1.1.79)	301/0301	. . Glucose-1-phosphatase (3.1.3.10)
301/0108	. . Acetylcholine esterase (3.1.1.80)	301/03011	. . Fructose-bisphosphatase (3.1.3.11)
301/01081	. . Quorum-quenching N-acyl-homoserine lactonase (3.1.1.81)	301/03012	. . Trehalose-phosphatase (3.1.3.12)
301/01082	. . Pheophorbide esterase (3.1.1.82)	301/03013	. . Bisphosphoglycerate phosphatase (3.1.3.13)
301/01083	. . Monoterpene epsilon-lactone hydrolase (3.1.1.83)	301/03014	. . Methylphosphothiolglycerate phosphatase (3.1.3.14)
301/01084	. . Cocaine esterase (3.1.1.84)	301/03015	. . Histidinol-phosphatase (3.1.3.15)
301/01085	. . Pimelyl-[acyl-carrier protein] methyl ester esterase (3.1.1.85)	301/03016	. . Phosphoprotein phosphatase (3.1.3.16), i.e. calcineurin
301/01086	. . Rhamnogalacturonan acetyltransferase (3.1.1.86)	301/03017	. . [Phosphorylase] phosphatase (3.1.3.17)
301/01087	. . Fumonisin B1 esterase (3.1.1.87)	301/03018	. . Phosphoglycolate phosphatase (3.1.3.18)
301/01088	. . Pyrethroid hydrolase (3.1.1.88)	301/03019	. . Glycerol-2-phosphatase (3.1.3.19)
301/01089	. . Protein phosphatase methyltransferase-1 (3.1.1.89)	301/0302	. . Phosphoglycerate phosphatase (3.1.3.20)
301/0109	. . All-trans-retinyl ester 13-cis isomerase (3.1.1.90)	301/03021	. . Glycerol-1-phosphatase (3.1.3.21)
301/01091	. . 2-Oxo-3-(5-oxofuran-2-ylidene)propanoate lactonase (3.1.1.91)	301/03022	. . Mannitol-1-phosphatase (3.1.3.22)
301/01092	. . 4-Sulfomucopolactone hydrolase (3.1.1.92)	301/03023	. . Sugar-phosphatase (3.1.3.23)
301/01093	. . Mycophenolic acid acyl-glucuronide esterase (3.1.1.93)	301/03024	. . Sucrose-phosphate phosphatase (3.1.3.24)
301/02	. . Thioester hydrolases (3.1.2)	301/03025	. . Inositol-phosphate phosphatase (3.1.3.25)
301/02001	. . Acetyl-CoA hydrolase (3.1.2.1)	301/03026	. . 4-Phytase (3.1.3.26), i.e. 6-phytase
301/02002	. . Palmitoyl-CoA hydrolase (3.1.2.2)	301/03027	. . Phosphatidylglycerophosphatase (3.1.3.27)
301/02003	. . Succinyl-CoA hydrolase (3.1.2.3)	301/03028	. . ADP-phosphoglycerate phosphatase (3.1.3.28)
301/02004	. . 3-Hydroxyisobutyryl-CoA hydrolase (3.1.2.4)	301/03029	. . N-Acylneuraminate-9-phosphatase (3.1.3.29)
301/02005	. . Hydroxymethylglutaryl-CoA hydrolase (3.1.2.5)	301/03031	. . Nucleotidase (3.1.3.31)
301/02006	. . Hydroxyacylglutathione hydrolase (3.1.2.6)	301/03032	. . Polynucleotide 3'-phosphatase (3.1.3.32)
301/02007	. . Glutathione thioesterase (3.1.2.7)	301/03033	. . Polynucleotide 5'-phosphatase (3.1.3.33)
301/0201	. . Formyl-CoA hydrolase (3.1.2.10)	301/03034	. . Deoxynucleotide 3'-phosphatase (3.1.3.34)
301/02011	. . Acetoacetyl-CoA hydrolase (3.1.2.11)	301/03035	. . Thymidylate 5'-phosphatase (3.1.3.35)
301/02012	. . S-Formylglutathione hydrolase (3.1.2.12)	301/03036	. . Phosphoinositide 5-phosphatase (3.1.3.36)
301/02013	. . S-Succinylglutathione hydrolase (3.1.2.13)	301/03037	. . Sedoheptulose-bisphosphatase (3.1.3.37)
301/02014	. . Oleoyl-[acyl-carrier-protein] hydrolase (3.1.2.14), i.e. ACP-thioesterase	301/03038	. . 3-Phosphoglycerate phosphatase (3.1.3.38)
		301/03039	. . Streptomycin-6-phosphatase (3.1.3.39)
		301/0304	. . Guanidinodeoxy-scyllo-inositol-4-phosphatase (3.1.3.40)
		301/03041	. . 4-Nitrophenylphosphatase (3.1.3.41)



301/03042	. . [Glycogen-synthase-D] phosphatase (3.1.3.42)	301/03086	. . Phosphatidylinositol-3,4,5-trisphosphate 5-phosphatase (3.1.3.86)
301/03043	. . [Pyruvate dehydrogenase (acetyl-transferring)]-phosphatase (3.1.3.43)	301/03087	. . 2-Hydroxy-3-keto-5-methylthiopentenyl-1-phosphate phosphatase (3.1.3.87)
301/03044	. . [Acetyl-CoA carboxylase]-phosphatase (3.1.3.44)	301/03088	. . 5"-Phosphoribostamycin phosphatase (3.1.3.88)
301/03045	. . 3-Deoxy-manno-octulosonate-8-phosphatase (3.1.3.45)	301/04	. . Phosphoric diester hydrolases (3.1.4)
301/03046	. . Fructose-2,6-bisphosphate 2-phosphatase (3.1.3.46)	301/04001	. . Phosphodiesterase I (3.1.4.1)
301/03047	. . [Hydroxymethylglutaryl-CoA reductase (NADPH)]-phosphatase (3.1.3.47)	301/04002	. . Glycerophosphocholine phosphodiesterase (3.1.4.2)
301/03048	. . Protein-tyrosine-phosphatase (3.1.3.48)	301/04003	. . Phospholipase C (3.1.4.3)
301/03049	. . [Pyruvate kinase]-phosphatase (3.1.3.49)	301/04004	. . Phospholipase D (3.1.4.4)
301/0305	. . Sorbitol-6-phosphatase (3.1.3.50)	301/04011	. . Phosphoinositide phospholipase C (3.1.4.11)
301/03051	. . Dolichyl-phosphatase (3.1.3.51)	301/04012	. . Sphingomyelin phosphodiesterase (3.1.4.12)
301/03052	. . [3-Methyl-2-oxobutanoate dehydrogenase (2-methylpropanoyl-transferring)]-phosphatase (3.1.3.52)	301/04013	. . Serine-ethanolaminephosphate phosphodiesterase (3.1.4.13)
301/03053	. . [Myosin-light-chain] phosphatase (3.1.3.53)	301/04014	. . [Acyl-carrier-protein] phosphodiesterase (3.1.4.14)
301/03054	. . Fructose-2,6-bisphosphate 6-phosphatase (3.1.3.54)	301/04015	. . Adenylyl-[glutamate--ammonia ligase] hydrolase (3.1.4.15)
301/03055	. . Caldesmon-phosphatase (3.1.3.55)	301/04016	. . 2',3'-Cyclic-nucleotide 2'-phosphodiesterase (3.1.4.16)
301/03056	. . Inositol-polyphosphate 5-phosphatase (3.1.3.56)	301/04017	. . 3',5'-Cyclic-nucleotide phosphodiesterase (3.1.4.17)
301/03057	. . Inositol-1,4-bisphosphate 1-phosphatase (3.1.3.57)	301/04035	. . 3',5'-Cyclic-GMP phosphodiesterase (3.1.4.35)
301/03058	. . Sugar-terminal-phosphatase (3.1.3.58)	301/04037	. . 2',3'-Cyclic-nucleotide 3'-phosphodiesterase (3.1.4.37)
301/03059	. . Alkylacetylgllycerophosphatase (3.1.3.59)	301/04038	. . Glycerophosphocholine cholinephosphodiesterase (3.1.4.38)
301/0306	. . Phosphoenolpyruvate phosphatase (3.1.3.60)	301/04039	. . Alkylglycerophosphoethanolamine phosphodiesterase (3.1.4.39)
301/03062	. . Multiple inositol-polyphosphate phosphatase (3.1.3.62)	301/0404	. . CMP-N-acetylneuraminate phosphodiesterase (3.1.4.40)
301/03063	. . 2-Carboxy-D-arabinitol-1-phosphatase (3.1.3.63)	301/04041	. . Sphingomyelin phosphodiesterase D (3.1.4.41)
301/03064	. . Phosphatidylinositol-3-phosphatase (3.1.3.64)	301/04042	. . Glycerol-1,2-cyclic-phosphate 2-phosphodiesterase (3.1.4.42)
301/03066	. . Phosphatidylinositol-3,4-bisphosphate 4-phosphatase (3.1.3.66)	301/04043	. . Glycerophosphoinositol inositolphosphodiesterase (3.1.4.43)
301/03067	. . Phosphatidylinositol-3,4,5-trisphosphate 3-phosphatase (3.1.3.67)	301/04044	. . Glycerophosphoinositol glycerophosphodiesterase (3.1.4.44)
301/03068	. . 2-Deoxyglucose-6-phosphatase (3.1.3.68)	301/04045	. . N-Acetylglucosamine-1-phosphodiester alpha-N-acetylglucosaminidase (3.1.4.45)
301/03069	. . Glucosylglycerol 3-phosphatase (3.1.3.69)	301/04046	. . Glycerophosphodiester phosphodiesterase (3.1.4.46)
301/0307	. . Mannosyl-3-phosphoglycerate phosphatase (3.1.3.70)	301/04048	. . Dolichylphosphate-glucose phosphodiesterase (3.1.4.48)
301/03071	. . 2-Phosphosulfolactate phosphatase (3.1.3.71)	301/04049	. . Dolichylphosphate-mannose phosphodiesterase (3.1.4.49)
301/03072	. . 5-Phytase (3.1.3.72)	301/0405	. . Glycosylphosphatidylinositol phospholipase D (3.1.4.50)
301/03073	. . Adenosylcobalamin/alpha-ribazole phosphatase (3.1.3.73)	301/04051	. . Glucose-1-phospho-D-mannosylglycoprotein phosphodiesterase (3.1.4.51)
301/03074	. . Pyridoxal phosphatase (3.1.3.74)	301/04052	. . Cyclic-guanylate-specific phosphodiesterase (3.1.4.52)
301/03075	. . Phosphoethanolamine/phosphocholine phosphatase (3.1.3.75)	301/04053	. . 3',5'-Cyclic-AMP phosphodiesterase (3.1.4.53)
301/03076	. . Lipid-phosphate phosphatase (3.1.3.76)	301/04054	. . N-Acetylphosphatidylethanolamine-hydrolyzing phospholipase D (3.1.4.54)
301/03077	. . Acireductone synthase (3.1.3.77)	301/05	. . Triphosphoric monoester hydrolases (3.1.5)
301/03078	. . Phosphatidylinositol-4,5-bisphosphate 4-phosphatase (3.1.3.78)	301/05001	. . dGTPase (3.1.5.1)
301/03079	. . Mannosylfructose-phosphate phosphatase (3.1.3.79)	301/06	. . Sulfuric ester hydrolases (3.1.6)
301/0308	. . 2,3-Bisphosphoglycerate 3-phosphatase (3.1.3.80)	301/06001	. . Arylsulfatase (3.1.6.1)
301/03081	. . Diacylglycerol diphosphate phosphatase (3.1.3.81)	301/06002	. . Steryl-sulfatase (3.1.6.2)
301/03082	. . D-Glycero-beta-D-manno-heptose 1,7-bisphosphate 7-phosphatase (3.1.3.82)	301/06003	. . Glycosulfatase (3.1.6.3)
301/03083	. . D-Glycero-alpha-D-manno-heptose-1,7-bisphosphate 7-phosphatase (3.1.3.83)	301/06004	. . N-Acetylgalactosamine-6-sulfatase (3.1.6.4)
301/03084	. . ADP-ribose 1"-phosphate phosphatase (3.1.3.84)		
301/03085	. . Glucosyl-3-phosphoglycerate phosphatase (3.1.3.85)		

- 301/06006 . . Choline-sulfatase (3.1.6.6)
- 301/06007 . . Cellulose-polysulfatase (3.1.6.7)
- 301/06008 . . Cerebroside-sulfatase (3.1.6.8)
- 301/06009 . . Chondro-4-sulfatase (3.1.6.9)
- 301/0601 . . Chondro-6-sulfatase (3.1.6.10)
- 301/06011 . . Disulfoglucosamine-6-sulfatase (3.1.6.11)
- 301/06012 . . N-Acetylgalactosamine-4-sulfatase (3.1.6.12)
- 301/06013 . . Iduronate-2-sulfatase (3.1.6.13)
- 301/06014 . . N-Acetylglucosamine-6-sulfatase (3.1.6.14)
- 301/06015 . . N-Sulfoglucosamine-3-sulfatase (3.1.6.15)
- 301/06016 . . Monomethyl-sulfatase (3.1.6.16)
- 301/06017 . . D-Lactate-2-sulfatase (3.1.6.17)
- 301/06018 . . Glucuronate-2-sulfatase (3.1.6.18)
- 301/07 . . Diphosphoric monoester hydrolases (3.1.7)
- 301/07001 . . Prenyl-diphosphatase (3.1.7.1)
- 301/07002 . . Guanosine-3',5'-bis(diphosphate) 3'-diphosphatase (3.1.7.2)
- 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	302/01068	. . Isoamylase (3.2.1.68)
302/01006	. . Endo-1,3(4)-beta-glucanase (3.2.1.6)	302/0107	. . Glucan 1,6-alpha-glucosidase (3.2.1.70)
302/01007	. . Inulinase (3.2.1.7)	302/01071	. . Glucan endo-1,2-beta-glucosidase (3.2.1.71)
302/01008	. . Endo-1,4-beta-xylanase (3.2.1.8)	302/01072	. . Xylan 1,3-beta-xylosidase (3.2.1.72)
302/0101	. . Oligo-1,6-glucosidase (3.2.1.10), i.e. sucrase	302/01073	. . Licheninase (3.2.1.73)
302/01011	. . Dextranase (3.2.1.11)	302/01074	. . Glucan 1,4-beta-glucosidase (3.2.1.74)
302/01014	. . Chitinase (3.2.1.14)	302/01075	. . Glucan endo-1,6-beta-glucosidase (3.2.1.75)
302/01015	. . Polygalacturonase (3.2.1.15)	302/01076	. . L-Iduronidase (3.2.1.76)
302/01017	. . Lysozyme (3.2.1.17)	302/01077	. . Mannan 1,2-(1,3)-alpha-mannosidase (3.2.1.77)
302/01018	. . Exo-alpha-sialidase (3.2.1.18), i.e. trans-sialidase	302/01078	. . Mannan endo-1,4-beta-mannosidase (3.2.1.78), i.e. endo-beta-mannanase
302/01019	. . Heparinase (3.2.1.19)	302/0108	. . Fructan beta-fructosidase (3.2.1.80)
302/0102	. . Alpha-glucosidase (3.2.1.20)	302/01081	. . Beta-agarase (3.2.1.81)
302/01021	. . Beta-glucosidase (3.2.1.21)	302/01082	. . Exo-poly-alpha-galacturonosidase (3.2.1.82)
302/01022	. . Alpha-galactosidase (3.2.1.22)	302/01083	. . Kappa-carrageenase (3.2.1.83)
302/01023	. . Beta-galactosidase (3.2.1.23), i.e. exo-(1-->4)- beta-D-galactanase	302/01084	. . Glucan 1,3-alpha-glucosidase (3.2.1.84), i.e. mutanase
302/01024	. . Alpha-mannosidase (3.2.1.24)	302/01085	. . 6-Phospho-beta-galactosidase (3.2.1.85)
302/01025	. . Beta-mannosidase (3.2.1.25), i.e. mannanase	302/01086	. . 6-Phospho-beta-glucosidase (3.2.1.86)
302/01026	. . Beta-fructofuranosidase (3.2.1.26), i.e. invertase	302/01087	. . Capsular-polysaccharide endo-1,3-alpha- galactosidase (3.2.1.87)
302/01028	. . Alpha, alpha-trehalase (3.2.1.28)	302/01088	. . Beta-L-arabinosidase (3.2.1.88)
302/01031	. . Beta-glucuronidase (3.2.1.31)	302/01089	. . Arabinogalactan endo-beta-1,4-galactanase (3.2.1.89)
302/01032	. . Xylan endo-1,3-beta-xylosidase (3.2.1.32), i.e. endo-1-3-beta-xylanase	302/01091	. . Cellulose 1,4-beta-cellobiosidase (3.2.1.91)
302/01033	. . Amylo-alpha-1,6-glucosidase (3.2.1.33)	302/01092	. . Peptidoglycan beta-N-acetylmuramidase (3.2.1.92)
302/01035	. . Hyaluronoglucosaminidase (3.2.1.35), i.e. hyaluronidase	302/01093	. . Alpha, alpha-phosphotrehalase (3.2.1.93)
302/01036	. . Hyaluronoglucuronidase (3.2.1.36)	302/01094	. . Glucan 1,6-alpha-isomaltosidase (3.2.1.94)
302/01037	. . Xylan 1,4-beta-xylosidase (3.2.1.37)	302/01095	. . Dextran 1,6-alpha-isomaltotriosidase (3.2.1.95)
302/01038	. . Beta-D-fucosidase (3.2.1.38)	302/01096	. . Mannosyl-glycoprotein endo-beta-N- acetylglucosaminidase (3.2.1.96)
302/01039	. . Glucan endo-1,3-beta-D-glucosidase (3.2.1.39)	302/01097	. . Glycopeptide alpha-N-acetylgalactosaminidase (3.2.1.97)
302/0104	. . Alpha-L-rhamnosidase (3.2.1.40)	302/01098	. . Glucan 1,4-alpha-maltohexaosidase (3.2.1.98)
302/01041	. . Pullulanase (3.2.1.41)	302/01099	. . Arabinan endo-1,5-alpha-L-arabinosidase (3.2.1.99)
302/01042	. . GDP-glucosidase (3.2.1.42)	302/011	. . Mannan 1,4-mannobiosidase (3.2.1.100)
302/01043	. . Beta-L-rhamnosidase (3.2.1.43)	302/01101	. . Mannan endo-1,6-alpha-mannosidase (3.2.1.101), i.e. endo-1,6-beta-mannanase
302/01044	. . Fucoidanase (3.2.1.44)	302/01102	. . Blood-group-substance endo-1,4-beta- galactosidase (3.2.1.102)
302/01045	. . Glucosylceramidase (3.2.1.45), i.e. beta- glucocerebrosidase	302/01103	. . Keratan-sulfate endo-1,4-beta-galactosidase (3.2.1.103)
302/01046	. . Galactosylceramidase (3.2.1.46)	302/01104	. . Steryl-beta-glucosidase (3.2.1.104)
302/01047	. . Galactosylgalactosylglucosylceramidase (3.2.1.47)	302/01105	. . 3-Alpha-(S)-strictosidine beta-glucosidase (3.2.1.105)
302/01048	. . Sucrose alpha-glucosidase (3.2.1.48), i.e. sucrase	302/01106	. . Mannosyl-oligosaccharide glucosidase (3.2.1.106), i.e. glucosidase I
302/01049	. . Alpha-N-acetylgalactosaminidase (3.2.1.49)	302/01107	. . Protein-glucosylgalactosylhydroxylysine glucosidase (3.2.1.107)
302/0105	. . Alpha-N-acetylglucosaminidase (3.2.1.50)	302/01108	. . Lactase (3.2.1.108)
302/01051	. . Alpha-L-fucosidase (3.2.1.51)	302/01109	. . Endogalactosaminidase (3.2.1.109)
302/01052	. . Beta-N-acetylhexosaminidase (3.2.1.52)	302/01111	. . 1,3-Alpha-L-fucosidase (3.2.1.111), i.e. 1,3- alpha-fucosidase
302/01053	. . Beta-N-acetylglactosaminidase (3.2.1.53)	302/01112	. . 2-Deoxyglucosidase (3.2.1.112)
302/01054	. . Cyclomaltodextrinase (3.2.1.54), i.e. cyclodextrinase	302/01113	. . Mannosyl-oligosaccharide 1,2-alpha-mannosidase (3.2.1.113), i.e. alpha-1,2-mannosidase
302/01055	. . Alpha-N-arabinofuranosidase (3.2.1.55)	302/01114	. . Mannosyl-oligosaccharide 1,3-1,6-alpha- mannosidase (3.2.1.114)
302/01056	. . Glucuronosyl-disulfoglucosamine glucuronidase (3.2.1.56), i.e. glycuronidase	302/01115	. . Branched-dextran exo-1,2-alpha-glucosidase (3.2.1.115)
302/01057	. . Isopullulanase (3.2.1.57)	302/01116	. . Glucan 1,4-alpha-maltotriohydrolase (3.2.1.116)
302/01058	. . Glucan 1,3-beta-glucosidase (3.2.1.58)		
302/01059	. . Glucan endo-1,3-alpha-glucosidase (3.2.1.59)		
302/0106	. . Glucan 1,4-alpha-maltotetraohydrolase (3.2.1.60)		
302/01061	. . Mycodextranase (3.2.1.61)		
302/01062	. . Glycosylceramidase (3.2.1.62)		
302/01063	. . 1,2-Alpha-L-fucosidase (3.2.1.63)		
302/01064	. . 2,6-Beta-fructan 6-levanbiohydrolase (3.2.1.64)		
302/01065	. . Levanase (3.2.1.65)		
302/01066	. . Quercitrinase (3.2.1.66)		
302/01067	. . Galacturan 1,4-alpha-galacturonidase (3.2.1.67)		

302/01117	. . Amygdalin beta-glucosidase (3.2.1.117)	302/01167	. . Baicalin-beta-D-glucuronidase (3.2.1.167)
302/01118	. . Prunasin beta-glucosidase (3.2.1.118), i.e. prunasin hydrolase	302/01168	. . Hesperidin 6-O-alpha-L-rhamnosyl-beta-D-glucosidase (3.2.1.168)
302/01119	. . Vicianin beta-glucosidase (3.2.1.119)	302/01169	. . Protein O-GlcNAcase (3.2.1.169)
302/0112	. . Oligoxyloglucan beta-glycosidase (3.2.1.120)	302/0117	. . Mannosylglycerate hydrolase (3.2.1.170)
302/01121	. . Polymannuronate hydrolase (3.2.1.121)	302/01171	. . Rhamnogalacturonan hydrolase (3.2.1.171), i.e. rhamnogalacturonase
302/01122	. . Maltose-6'-phosphate glucosidase (3.2.1.122)	302/01172	. . Unsaturated rhamnogalacturonyl hydrolase (3.2.1.172)
302/01123	. . Endoglycosylceramidase (3.2.1.123)	302/01173	. . Rhamnogalacturonan galacturonohydrolase (3.2.1.173)
302/01124	. . 3-Deoxy-2-octulosonidase (3.2.1.124)	302/01174	. . Rhamnogalacturonan rhamnohydrolase (3.2.1.174)
302/01125	. . Raucaffricine beta-glucosidase (3.2.1.125)	302/01175	. . Beta-D-glucopyranosyl abscisate beta-glucosidase (3.2.1.175)
302/01126	. . Coniferin beta-glucosidase (3.2.1.126)	302/01176	. . Cellulose 1,4-beta-cellobiosidase (reducing end) (3.2.1.176)
302/01127	. . 1,6-alpha-L-fucosidase (3.2.1.127)	302/01177	. . Alpha-D-xyloside xylohydrolase (3.2.1.177)
302/01128	. . Glycyrrhizinate beta-glucuronidase (3.2.1.128), i.e. GL beta-D-glucuronidase	302/01178	. . Beta-porphyrinase (3.2.1.178)
302/01129	. . Endo-alpha-sialidase (3.2.1.129)	302/01179	. . Gellan tetrasaccharide unsaturated glucuronyl hydrolase (3.2.1.179)
302/0113	. . Glycoprotein endo-alpha-1,2-mannosidase (3.2.1.130)	302/0118	. . Unsaturated chondroitin disaccharide hydrolase (3.2.1.180)
302/01131	. . Xylan alpha-1,2-glucuronosidase (3.2.1.131)	302/01181	. . Galactan endo-beta-1,3-galactanase (3.2.1.181)
302/01132	. . Chitosanase (3.2.1.132)	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)
302/01133	. . Glucan 1,4-alpha-maltohydrolase (3.2.1.133), i.e. maltogenic alpha-amylase	302/01183	. . UDP-N-acetylglucosamine 2-epimerase (hydrolysing) (3.2.1.183)
302/01134	. . Difructose-anhydride synthase (3.2.1.134)	302/01184	. . UDP-N,N'-diacetylglucosamine 2-epimerase (hydrolysing) (3.2.1.184)
302/01135	. . Neopullulanase (3.2.1.135)	302/02	. . hydrolysing N-glycosyl compounds (3.2.2)
302/01136	. . Glucuronoarabinoxylan endo-1,4-beta-xylanase (3.2.1.136), i.e. feraxanase or feraxan-endoxylanase	302/02001	. . Purine nucleosidase (3.2.2.1)
302/01137	. . Mannan exo-1,2-1,6-alpha-mannosidase (3.2.1.137)	302/02002	. . Inosine nucleosidase (3.2.2.2)
302/01139	. . Alpha-glucuronidase (3.2.1.139)	302/02003	. . Uridine nucleosidase (3.2.2.3)
302/0114	. . Lacto-N-biosidase (3.2.1.140)	302/02004	. . AMP nucleosidase (3.2.2.4)
302/01141	. . 4-Alpha-D-{(1->4)-alpha-D-glucano} trehalose trehalohydrolase (3.2.1.141)	302/02005	. . NAD <sup>+</sup> nucleosidase (3.2.2.5)
302/01142	. . Limit dextrinase (3.2.1.142)	302/02006	. . NAD(P) <sup>+</sup> nucleosidase (3.2.2.6)
302/01143	. . Poly(ADP-ribose) glycohydrolase (3.2.1.143)	302/02007	. . Adenosine nucleosidase (3.2.2.7)
302/01144	. . 3-Deoxyoctulosonase (3.2.1.144)	302/02008	. . Ribosylpyrimidine nucleosidase (3.2.2.8)
302/01145	. . Galactan 1,3-beta-galactosidase (3.2.1.145), i.e. arabinogalactan endo-1,3-beta-galactosidase	302/02009	. . Adenosylhomocysteine nucleosidase (3.2.2.9)
302/01146	. . Beta-galactofuranosidase (3.2.1.146)	302/0201	. . Pyrimidine-5'-nucleotide nucleosidase (3.2.2.10)
302/01147	. . Thioglucosidase (3.2.1.147), i.e. myrosinase	302/02011	. . Beta-aspartyl-N-acetylglucosaminidase (3.2.2.11)
302/01149	. . Beta-primeverosidase (3.2.1.149)	302/02012	. . Inosinate nucleosidase (3.2.2.12)
302/0115	. . Oligoxyloglucan reducing-end-specific cellobiohydrolase (3.2.1.150)	302/02013	. . 1-Methyladenosine nucleosidase (3.2.2.13)
302/01151	. . Xyloglucan-specific endo-beta-1,4-glucanase (3.2.1.151), i.e. endoxyloglucanase	302/02014	. . NMN nucleosidase (3.2.2.14)
302/01152	. . Mannosylglycoprotein endo-beta-mannosidase (3.2.1.152)	302/02015	. . DNA-deoxyinosine glycosylase (3.2.2.15)
302/01153	. . Fructan beta-(2,1)-fructosidase (3.2.1.153)	302/02016	. . Methylthioadenosine nucleosidase (3.2.2.16)
302/01154	. . Fructan beta-(2,6)-fructosidase (3.2.1.154)	302/02017	. . Deoxyribodipyrimidine endonucleosidase (3.2.2.17)
302/01155	. . Xyloglucan-specific exo-beta-1,4-glucanase (3.2.1.155), i.e. exoxyloglucanase	302/02019	. . Protein ADP-ribosylarginine hydrolase (3.2.2.19)
302/01156	. . Oligosaccharide reducing-end xylanase (3.2.1.156)	302/0202	. . DNA-3-methyladenine glycosylase I (3.2.2.20), i.e. adenine DNA glycosylase
302/01157	. . Iota-carrageenase (3.2.1.157)	302/02021	. . DNA-3-methyladenine glycosylase II (3.2.2.21)
302/01158	. . Alpha-agarase (3.2.1.158)	302/02022	. . rRNA N-glycosylase (3.2.2.22)
302/01159	. . Alpha-neoagaro-oligosaccharide hydrolase (3.2.1.159)	302/02023	. . DNA-formamidopyrimidine glycosylase (3.2.2.23)
302/01161	. . Beta-apiosyl-beta-glucosidase (3.2.1.161)	302/02024	. . ADP-ribosyl-[dinitrogen reductase] hydrolase (3.2.2.24)
302/01162	. . Lambda-carrageenase (3.2.1.162)	302/02025	. . N-Methyl nucleosidase (3.2.2.25)
302/01163	. . 1,6-Alpha-D-mannosidase (3.2.1.163)	302/02026	. . Futosine hydrolase (3.2.2.26)
302/01164	. . Galactan endo-1,6-beta-galactosidase (3.2.1.164)	302/02027	. . Uracil-DNA glycosylase (3.2.2.27)
302/01165	. . Exo-1,4-beta-D-glucosaminidase (3.2.1.165), i.e. exochitosanase		
302/01166	. . Heparanase (3.2.1.166)		

- 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
- 304/21008 . . Kallikrein (3.4.21.8) ([C12Y 304/21034](#), [C12Y 304/21035](#) take precedence)
- 304/21009 . . Enteropeptidase (3.4.21.9), i.e. enterokinase
- 304/2101 . . Acrosin (3.4.21.10)
- 304/21011 . . Elastase (3.4.21.11) ([C12Y 304/21036](#), [C12Y 304/21037](#) take precedence)
- 304/21012 . . Alpha-lytic endopeptidase (3.4.21.12)
- 304/21014 . . Microbial serine proteases (3.4.21.14) ([C12Y 304/21062](#) - [C12Y 304/21067](#) takes precedence)
- 304/21019 . . Glutamyl endopeptidase (3.4.21.19)
- 304/2102 . . Cathepsin G (3.4.21.20)
- 304/21021 . . Coagulation factor VIIa (3.4.21.21)
- 304/21022 . . Coagulation factor IXa (3.4.21.22)
- 304/21025 . . Cucumisin (3.4.21.25)
- 304/21026 . . Prolyl oligopeptidase (3.4.21.26), i.e. proline-specific endopeptidase
- 304/21027 . . Coagulation factor XIa (3.4.21.27)
- 304/21031 . . Urokinase (3.4.21.31) ([C12Y 304/21068](#), [C12Y 304/21073](#) take precedence)
- 304/21032 . . Brachyurin (3.4.21.32)
- 304/21034 . . Plasma kallikrein (3.4.21.34)
- 304/21035 . . Tissue kallikrein (3.4.21.35)
- 304/21036 . . Pancreatic elastase (3.4.21.36)
- 304/21037 . . Leukocyte elastase (3.4.21.37), i.e. neutrophil-elastase
- 304/21038 . . Coagulation factor XIIa (3.4.21.38)
- 304/21039 . . Chymase (3.4.21.39)
- 304/21041 . . Complement subcomponent C1r (3.4.21.41)
- 304/21042 . . Complement subcomponent C1s (3.4.21.42)
- 304/21043 . . Classical-complement-pathway C3/C5 convertase (3.4.21.43)
- 304/21045 . . Complement factor I (3.4.21.45)
- 304/21046 . . Complement factor D (3.4.21.46)
- 304/21047 . . Alternative-complement-pathway C3/C5 convertase (3.4.21.47), i.e. properdin factor B
- 304/21048 . . Cerevisin (3.4.21.48)
- 304/21049 . . Hypodermin C (3.4.21.49)
- 304/2105 . . Lysyl endopeptidase (3.4.21.50)
- 304/21053 . . Endopeptidase La (3.4.21.53)
- 304/21054 . . Gamma-renin (3.4.21.54)
- 304/21055 . . Venombin AB (3.4.21.55)
- 304/21057 . . Leucyl endopeptidase (3.4.21.57)
- 304/21059 . . Tryptase (3.4.21.59)
- 304/2106 . . Scutellarin (3.4.21.60)
- 304/21061 . . Kexin (3.4.21.61), i.e. proprotein convertase subtilisin/kexin type 9
- 304/21062 . . Subtilisin (3.4.21.62)
- 304/21063 . . Oryzin (3.4.21.63)
- 304/21064 . . Peptidase K (3.4.21.64)
- 304/21065 . . Thermomycolin (3.4.21.65)
- 304/21066 . . Thermitase (3.4.21.66)
- 304/21067 . . Endopeptidase So (3.4.21.67)
- 304/21068 . . Tissue plasminogen activator (3.4.21.68), i.e. tPA
- 304/21069 . . Protein C activated (3.4.21.69)
- 304/2107 . . Pancreatic endopeptidase E (3.4.21.70)
- 304/21071 . . Pancreatic elastase II (3.4.21.71)
- 304/21072 . . IgA-specific serine endopeptidase (3.4.21.72)
- 304/21073 . . u-Plasminogen activator (3.4.21.73), i.e. urokinase
- 304/21074 . . Venombin A (3.4.21.74)
- 304/21075 . . Furin (3.4.21.75)
- 304/21076 . . Myeloblastin (3.4.21.76)
- 304/21077 . . Semenogelase (3.4.21.77), i.e. prostate specific antigen or PSA or kallikrein 3
- 304/21078 . . Granzyme A (3.4.21.78)
- 304/21079 . . Granzyme B (3.4.21.79)
- 304/2108 . . Streptogrisin A (3.4.21.80)
- 304/21081 . . Streptogrisin B (3.4.21.81)
- 304/21082 . . Glutamyl endopeptidase II (3.4.21.82)
- 304/21083 . . Oligopeptidase B (3.4.21.83), i.e. trypsin-like protease
- 304/21084 . . Limulus clotting factor C (3.4.21.84)
- 304/21085 . . Limulus clotting factor B (3.4.21.85)
- 304/21086 . . Limulus clotting enzyme (3.4.21.86)
- 304/21088 . . Repressor LexA (3.4.21.88)
- 304/21089 . . Signal peptidase I (3.4.21.89)
- 304/2109 . . Togavirin (3.4.21.90)
- 304/21091 . . Flavivirin (3.4.21.91)
- 304/21092 . . Endopeptidase Clp (3.4.21.92)
- 304/21093 . . Proprotein convertase 1 (3.4.21.93)
- 304/21094 . . Proprotein convertase 2 (3.4.21.94), i.e. prohormone convertase 2
- 304/21095 . . Snake venom factor V activator (3.4.21.95)
- 304/21096 . . Lactocepin (3.4.21.96)
- 304/21097 . . Assemblin (3.4.21.97)
- 304/21098 . . Hepacivirin (3.4.21.98)
- 304/21099 . . Spermosin (3.4.21.99)
- 304/211 . . Sedolisin (3.4.21.100)
- 304/21101 . . Xanthomonalisin (3.4.21.101)
- 304/21102 . . C-terminal processing peptidase (3.4.21.102)
- 304/21103 . . Physarolisin (3.4.21.103), i.e. physaropepsin
- 304/21104 . . Mannan-binding lectin-associated serine protease-2 (3.4.21.104)
- 304/21105 . . Rhomboid protease (3.4.21.105)
- 304/21106 . . Hepsin (3.4.21.106)
- 304/21107 . . Peptidase Do (3.4.21.107)
- 304/21108 . . HtrA2 peptidase (3.4.21.108)
- 304/21109 . . Matriptase (3.4.21.109)
- 304/2111 . . C5a peptidase (3.4.21.110)



304/21111	. . Aqualysin 1 (3.4.21.111)	304/22055	. . Caspase-2 (3.4.22.55)
304/21112	. . Site-1 protease (3.4.21.112), i.e. subtilisin kexin isozyme-1	304/22056	. . Caspase-3 (3.4.22.56)
304/21113	. . Pestivirus NS3 polyprotein peptidase (3.4.21.113)	304/22057	. . Caspase-4 (3.4.22.57)
304/21114	. . Equine arterivirus serine peptidase (3.4.21.114)	304/22058	. . Caspase-5 (3.4.22.58)
304/21115	. . Infectious pancreatic necrosis birnavirus Vp4 peptidase (3.4.21.115)	304/22059	. . Caspase-6 (3.4.22.59)
304/21116	. . SpoIVB peptidase (3.4.21.116)	304/2206	. . Caspase-7 (3.4.22.60)
304/21117	. . Stratum corneum chymotryptic enzyme (3.4.21.117)	304/22061	. . Caspase-8 (3.4.22.61)
304/21118	. . Kallikrein 8 (3.4.21.118)	304/22062	. . Caspase-9 (3.4.22.62)
304/21119	. . Kallikrein 13 (3.4.21.119)	304/22063	. . Caspase-10 (3.4.22.63)
304/2112	. . Oviductin (3.4.21.120)	304/22064	. . Caspase-11 (3.4.22.64)
304/21826	. . Proprotein convertase 5 (3.4.21.B26)	304/22065	. . Peptidase 1 (mite) (3.4.22.65)
304/22	. Cysteine endopeptidases (3.4.22)	304/22066	. . Calicivirin (3.4.22.66)
304/22001	. . Cathepsin B (3.4.22.1)	304/22067	. . Zingipain (3.4.22.67)
304/22002	. . Papain (3.4.22.2)	304/22068	. . Ulp1 peptidase (3.4.22.68)
304/22003	. . Ficin (3.4.22.3)	304/22069	. . SARS coronavirus main proteinase (3.4.22.69)
304/22004	. . Bromelain (3.4.22.4) ( <a href="#">C12Y 304/22032</a> , <a href="#">C12Y 304/22033</a> take precedence)	304/2207	. . Sortase A (3.4.22.70)
304/22006	. . Chymopapain (3.4.22.6)	304/22071	. . Sortase B (3.4.22.71)
304/22007	. . Asclepain (3.4.22.7)	304/23	. Aspartic endopeptidases (3.4.23)
304/22008	. . Clostripain (3.4.22.8)	304/23001	. . Pepsin A (3.4.23.1)
304/2201	. . Streptopain (3.4.22.10)	304/23002	. . Pepsin B (3.4.23.2)
304/22014	. . Actinidain (3.4.22.14)	304/23003	. . Gastricsin (3.4.23.3)
304/22015	. . Cathepsin L (3.4.22.15)	304/23004	. . Chymosin (3.4.23.4), i.e. rennin
304/22016	. . Cathepsin H (3.4.22.16)	304/23005	. . Cathepsin D (3.4.23.5)
304/22017	. . Calpain (3.4.22.17) ( <a href="#">C12Y 304/22052</a> , <a href="#">C12Y 304/22053</a> take precedence)	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)
304/22024	. . Cathepsin T (3.4.22.24)	304/23012	. . Nepenthesin (3.4.23.12)
304/22025	. . Glycyl endopeptidase (3.4.22.25)	304/23015	. . Renin (3.4.23.15)
304/22026	. . Cancer procoagulant (3.4.22.26)	304/23016	. . HIV-1 retropepsin (3.4.23.16)
304/22027	. . Cathepsin S (3.4.22.27)	304/23017	. . Pro-opiomelanocortin converting enzyme (3.4.23.17)
304/22028	. . Picornain 3C (3.4.22.28)	304/23018	. . Aspergillopepsin I (3.4.23.18)
304/22029	. . Picornain 2A (3.4.22.29)	304/23019	. . Aspergillopepsin II (3.4.23.19)
304/2203	. . Caricain (3.4.22.30)	304/2302	. . Penicillopepsin (3.4.23.20)
304/22031	. . Ananain (3.4.22.31)	304/23021	. . Rhizopuspepsin (3.4.23.21)
304/22032	. . Stem bromelain (3.4.22.32)	304/23022	. . Endothiapepsin (3.4.23.22)
304/22033	. . Fruit bromelain (3.4.22.33), i.e. juice bromelain	304/23023	. . Mucorpepsin (3.4.23.23)
304/22034	. . Legumain (3.4.22.34), i.e. asparaginy endopeptidase	304/23024	. . Candidapepsin (3.4.23.24)
304/22035	. . Histolysain (3.4.22.35)	304/23025	. . Saccharopepsin (3.4.23.25), i.e. yeast proteinase A
304/22036	. . Caspase-1 (3.4.22.36), i.e. interleukin-1-beta-convertase	304/23026	. . Rhodotorulapepsin (3.4.23.26)
304/22037	. . Gingipain R (3.4.22.37)	304/23028	. . Acrocylindropepsin (3.4.23.28)
304/22038	. . Cathepsin K (3.4.22.38)	304/23029	. . Polyporopepsin (3.4.23.29)
304/22039	. . Adenain (3.4.22.39)	304/2303	. . Pycnoporopepsin (3.4.23.30)
304/2204	. . Bleomycin hydrolase (3.4.22.40)	304/23031	. . Scytalidopepsin A (3.4.23.31)
304/22041	. . Cathepsin F (3.4.22.41)	304/23032	. . Scytalidopepsin B (3.4.23.32)
304/22042	. . Cathepsin O (3.4.22.42)	304/23034	. . Cathepsin E (3.4.23.34)
304/22043	. . Cathepsin V (3.4.22.43)	304/23035	. . Barrierpepsin (3.4.23.35)
304/22044	. . Nuclear-inclusion-a endopeptidase (3.4.22.44)	304/23036	. . Signal peptidase II (3.4.23.36)
304/22045	. . Helper-component proteinase (3.4.22.45)	304/23038	. . Plasmepsin I (3.4.23.38)
304/22046	. . L-Peptidase (3.4.22.46)	304/23039	. . Plasmepsin II (3.4.23.39)
304/22047	. . Gingipain K (3.4.22.47)	304/2304	. . Phytapsin (3.4.23.40)
304/22048	. . Staphopain (3.4.22.48)	304/23041	. . Yapsin 1 (3.4.23.41)
304/22049	. . Separase (3.4.22.49)	304/23042	. . Thermopsin (3.4.23.42)
304/2205	. . V-Cath endopeptidase (3.4.22.50)	304/23043	. . Prepilin peptidase (3.4.23.43)
304/22051	. . Cruzipain (3.4.22.51)	304/23044	. . Nodavirus endopeptidase (3.4.23.44)
304/22052	. . Calpain-1 (3.4.22.52)	304/23045	. . Memapsin 1 (3.4.23.45), i.e. beta-secretase 2 or BACE2
304/22053	. . Calpain-2 (3.4.22.53), i.e. m-calpain	304/23046	. . Memapsin 2 (3.4.23.46), i.e. beta-secretase 1 or BACE
304/22054	. . Calpain-3 (3.4.22.54), i.e. calpain p94	304/23047	. . HIV-2 retropepsin (3.4.23.47)
		304/23048	. . Plasminogen activator Pla (3.4.23.48)

- 304/23049 . . Omptin (3.4.23.49)
- 304/2305 . . Human endogenous retrovirus K endopeptidase (3.4.23.50)
- 304/23051 . . HycI peptidase (3.4.23.51)
- 304/23052 . . Preflagellin peptidase (3.4.23.52)
- 304/24 . . Metalloendopeptidases (3.4.24)
- 304/24001 . . Atrolysin A (3.4.24.1)
- 304/24003 . . Microbial collagenase (3.4.24.3)
- 304/24004 . . Microbial metalloproteinases (3.4.24.4)  
([C12Y 304/24025](#) - [C12Y 304/24032](#),  
[C12Y 304/24039](#), [C12Y 304/2404](#) take  
precedence)
- 304/24005 . . Lens neutral proteinase (3.4.24.5)  
([C12Y 304/22052](#), [C12Y 304/22053](#),  
[C12Y 304/25001](#) take precedence)
- 304/24006 . . Leucolysin (3.4.24.6)
- 304/24007 . . Interstitial collagenase (3.4.24.7), i.e. matrix metalloproteinase 1 or MMP1
- 304/24011 . . Neprilysin (3.4.24.11), i.e. enkephalinase or neutral endopeptidase 24.11
- 304/24012 . . Envelysin (3.4.24.12)
- 304/24013 . . IgA-specific metalloendopeptidase (3.4.24.13)
- 304/24014 . . Procollagen N-endopeptidase (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-endopeptidase (3.4.24.19)
- 304/2402 . . Peptidyl-Lys metalloendopeptidase (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 metalloendopeptidase (3.4.24.32)
- 304/24033 . . Peptidyl-Asp metalloendopeptidase (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. glycoprotease
- 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--HslV 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)	305/01064	Nalpa-benzyloxycarbonylleucine hydrolase (3.5.1.64)
305/01011	Penicillin amidase (3.5.1.11), i.e. penicillin-amidohydrolase	305/01065	Theanine hydrolase (3.5.1.65)
305/01012	Biotinidase (3.5.1.12)	305/01066	2-(Hydroxymethyl)-3-(acetamidomethylene)succinate hydrolase (3.5.1.66)
305/01013	Aryl-acylamidase (3.5.1.13)	305/01067	4-Methyleneglutaminase (3.5.1.67)
305/01014	Aminoacylase (3.5.1.14)	305/01068	N-Formylglutamate deformylase (3.5.1.68)
305/01015	Aspartoacylase (3.5.1.15)	305/01069	Glycosphingolipid deacylase (3.5.1.69)
305/01016	Acetylornithine deacetylase (3.5.1.16)	305/0107	Aculeacin-A deacylase (3.5.1.70)
305/01017	Acyl-lysine deacylase (3.5.1.17)	305/01071	N-Feruloylglycine deacylase (3.5.1.71)
305/01018	Succinyl-diaminopimelate desuccinylase (3.5.1.18)	305/01072	D-Benzoylarginine-4-nitroanilide amidase (3.5.1.72)
305/01019	Nicotinamidase (3.5.1.19)	305/01073	Carnitinamidase (3.5.1.73)
305/0102	Citrullinase (3.5.1.20)	305/01074	Chenodeoxycholytaurine hydrolase (3.5.1.74)
305/01021	N-Acetyl-beta-alanine deacetylase (3.5.1.21)	305/01075	Urethanase (3.5.1.75)
305/01022	Pantothenase (3.5.1.22)	305/01076	Arylalkyl acylamidase (3.5.1.76)
305/01023	Ceramidase (3.5.1.23)	305/01077	N-Carbamoyl-D-amino-acid hydrolase (3.5.1.77)
305/01024	Choloylglycine hydrolase (3.5.1.24), i.e. bile salt hydrolase	305/01078	Glutathionylspermidine amidase (3.5.1.78)
305/01025	N-Acetylglucosamine-6-phosphate deacetylase (3.5.1.25)	305/01079	Phthalyl amidase (3.5.1.79)
305/01026	N4-(Beta-N-acetylglucosaminyl)-L-asparaginase (3.5.1.26)	305/01081	N-Acyl-D-amino-acid deacylase (3.5.1.81)
305/01027	N-Formylmethionylaminoacyl-tRNA deformylase (3.5.1.27)	305/01082	N-Acyl-D-glutamate deacylase (3.5.1.82)
305/01028	N-Acetylmuramoyl-L-alanine amidase (3.5.1.28)	305/01083	N-Acyl-D-aspartate deacylase (3.5.1.83)
305/01029	2-(Acetamidomethylene)succinate hydrolase (3.5.1.29)	305/01084	Biuret amidohydrolase (3.5.1.84)
305/0103	5-Aminopentanamidase (3.5.1.30)	305/01085	(S)-N-Acetyl-1-phenylethylamine hydrolase (3.5.1.85)
305/01031	Formylmethionine deformylase (3.5.1.31)	305/01086	Mandelamide amidase (3.5.1.86)
305/01032	Hippurate hydrolase (3.5.1.32)	305/01087	N-Carbamoyl-L-amino-acid hydrolase (3.5.1.87)
305/01033	N-Acetylglucosamine deacetylase (3.5.1.33)	305/01088	Peptide deformylase (3.5.1.88)
305/01035	D-Glutaminase (3.5.1.35)	305/01089	N-Acetylglucosaminylphosphatidylinositol deacetylase (3.5.1.89)
305/01036	N-Methyl-2-oxoglutaramate hydrolase (3.5.1.36)	305/0109	Adenosylcobinamide hydrolase (3.5.1.90)
305/01038	Glutamin-(asparagin)-ase (3.5.1.38)	305/01091	N-Substituted formamide deformylase (3.5.1.91)
305/01039	Alkylamidase (3.5.1.39)	305/01092	Pantetheine hydrolase (3.5.1.92)
305/0104	Acylagmatine amidase (3.5.1.40)	305/01093	Glutaryl-7-aminocephalosporanic-acid acylase (3.5.1.93)
305/01041	Chitin deacetylase (3.5.1.41)	305/01094	Gamma-glutamyl-gamma-aminobutyrate hydrolase (3.5.1.94)
305/01042	Nicotinamide-nucleotide amidase (3.5.1.42)	305/01095	N-Malonylurea hydrolase (3.5.1.95)
305/01043	Peptidyl-glutaminase (3.5.1.43)	305/01096	Succinylglutamate desuccinylase (3.5.1.96)
305/01044	Protein-glutamine glutaminase (3.5.1.44)	305/01097	Acyl-homoserine-lactone acylase (3.5.1.97)
305/01046	6-Aminohexanoate-dimer hydrolase (3.5.1.46)	305/01098	Histone deacetylase (3.5.1.98), i.e. sirtuin deacetylase
305/01047	N-Acetyldiaminopimelate deacetylase (3.5.1.47)	305/01099	Fatty acid amide hydrolase (3.5.1.99)
305/01048	Acetylspermidine deacetylase (3.5.1.48)	305/011	(R)-Amidase (3.5.1.100)
305/01049	Formamidase (3.5.1.49)	305/01101	L-Proline amide hydrolase (3.5.1.101)
305/0105	Pentanamidase (3.5.1.50)	305/01102	2-Amino-5-formylamino-6-ribosylaminopyrimidin-4(3H)-one 5'-monophosphate deformylase (3.5.1.102)
305/01051	4-Acetamidobutyryl-CoA deacetylase (3.5.1.51)	305/01103	N-Acetyl-1-D-myo-inositol-2-amino-2-deoxy-alpha-D-glucopyranoside deacetylase (3.5.1.103)
305/01052	Peptide-N4-(N-acetyl-beta-glucosaminyl)asparagine amidase (3.5.1.52), i.e. glycopeptidase	305/01104	Peptidoglycan-N-acetylglucosamine deacetylase (3.5.1.104)
305/01053	N-carbamoylputrescine amidase (3.5.1.53)	305/01105	Chitin disaccharide deacetylase (3.5.1.105)
305/01054	Allophanate hydrolase (3.5.1.54)	305/01106	N-formylmaleamate deformylase (3.5.1.106)
305/01055	Long-chain-fatty-acyl-glutamate deacylase (3.5.1.55)	305/01107	Maleamate amidohydrolase (3.5.1.107)
305/01056	N,N-Dimethylformamidase (3.5.1.56)	305/01108	UDP-3-O-acyl-N-acetylglucosamine deacetylase (3.5.1.108)
305/01057	Tryptophanamidase (3.5.1.57)	305/01109	Sphingomyelin deacylase (3.5.1.109)
305/01058	N-Benzoyloxycarbonylglycine hydrolase (3.5.1.58)	305/0111	Peroxyureidoacrylate/ureidoacrylate amidohydrolase (3.5.1.110)
305/01059	N-Carbamoylsarcosine amidase (3.5.1.59)	305/01111	2-Oxoglutaramate amidase (3.5.1.111)
305/0106	N-(Long-chain-acyl)ethanolamine deacylase (3.5.1.60)	305/01112	2'-N-Acetylparomamine deacetylase (3.5.1.112)
305/01061	Mimosinase (3.5.1.61)		
305/01062	Acetylputrescine deacetylase (3.5.1.62)		
305/01063	4-Acetamidobutyrate deacetylase (3.5.1.63)		

- 305/01113 . . 2'''-Acetyl-6'''-hydroxyneomycin C deacetylase (3.5.1.113)
- 305/02 . . in cyclic amides (3.5.2)
- 305/02001 . . Barbiturase (3.5.2.1)
- 305/02002 . . Dihydropyrimidinase (3.5.2.2), i.e. hydantoinase
- 305/02003 . . Dihydroorotase (3.5.2.3)
- 305/02004 . . Carboxymethylhydantoinase (3.5.2.4)
- 305/02005 . . Allantoinase (3.5.2.5)
- 305/02006 . . Beta-lactamase (3.5.2.6)
- 305/02007 . . Imidazolonepropionase (3.5.2.7)
- 305/02009 . . 5-Oxoprolinase (ATP-hydrolysing) (3.5.2.9)
- 305/0201 . . Creatininase (3.5.2.10)
- 305/02011 . . L-Lysine-lactamase (3.5.2.11)
- 305/02012 . . 6-Aminohexanoate-cyclic-dimer hydrolase (3.5.2.12)
- 305/02013 . . 2,5-Dioxopiperazine hydrolase (3.5.2.13)
- 305/02014 . . N-Methylhydantoinase (ATP-hydrolyzing) (3.5.2.14)
- 305/02015 . . Cyanuric acid amidohydrolase (3.5.2.15)
- 305/02016 . . Maleimide hydrolase (3.5.2.16)
- 305/02017 . . Hydroxyisourate hydrolase (3.5.2.17)
- 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 . . Diguandinobutanase (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)	306/03009	. . Na <sup>+</sup> /K <sup>+</sup> -exchanging ATPase (3.6.3.9)
306/01017	. . Bis(5'-nucleosyl)-tetraphosphatase (asymmetrical) (3.6.1.17)	306/0301	. . H <sup>+</sup> /K <sup>+</sup> -exchanging ATPase (3.6.3.10)
306/01018	. . FAD diphosphatase (3.6.1.18)	306/03011	. . Cl <sup>-</sup> -transporting ATPase (3.6.3.11)
306/01019	. . Nucleoside-triphosphate diphosphatase (3.6.1.19)	306/03012	. . K <sup>+</sup> -transporting ATPase (3.6.3.12)
306/0102	. . 5'-Acylphosphoadenosine hydrolase (3.6.1.20)	306/03014	. . H <sup>+</sup> -transporting two-sector ATPase (3.6.3.14), i.e. F1 ATPase
306/01021	. . ADP-sugar diphosphatase (3.6.1.21)	306/03015	. . Na <sup>+</sup> -transporting two-sector ATPase (3.6.3.15)
306/01022	. . NAD <sup>+</sup> diphosphatase (3.6.1.22)	306/03016	. . Arsenite-transporting ATPase (3.6.3.16)
306/01023	. . dUTP diphosphatase (3.6.1.23)	306/03017	. . Monosaccharide-transporting ATPase (3.6.3.17)
306/01024	. . Nucleoside phosphoacylhydrolase (3.6.1.24)	306/03018	. . Oligosaccharide-transporting ATPase (3.6.3.18)
306/01025	. . Triphosphatase (3.6.1.25)	306/03019	. . Maltose-transporting ATPase (3.6.3.19)
306/01026	. . CDP-diacylglycerol diphosphatase (3.6.1.26)	306/0302	. . Glycerol-3-phosphate-transporting ATPase (3.6.3.20)
306/01027	. . Undecaprenyl-diphosphate phosphatase (3.6.1.27)	306/03021	. . Polar-amino-acid-transporting ATPase (3.6.3.21)
306/01028	. . Thiamine-triphosphatase (3.6.1.28)	306/03022	. . Nonpolar-amino-acid-transporting ATPase (3.6.3.22)
306/01029	. . Bis(5'-adenosyl)-triphosphatase (3.6.1.29)	306/03023	. . Oligopeptide-transporting ATPase (3.6.3.23)
306/0103	. . m7G(5')pppN diphosphatase (3.6.1.30) ( <a href="#">C12Y 306/01059</a> and <a href="#">C12Y 306/01062</a> take precedence)	306/03024	. . Nickel-transporting ATPase (3.6.3.24)
306/01031	. . Phosphoribosyl-ATP diphosphatase (3.6.1.31)	306/03025	. . Sulfate-transporting ATPase (3.6.3.25)
306/01039	. . Thymidine-triphosphatase (3.6.1.39), i.e. T4 helicase	306/03026	. . Nitrate-transporting ATPase (3.6.3.26)
306/0104	. . Guanosine-5'-triphosphate,3'-diphosphate diphosphatase (3.6.1.40)	306/03027	. . Phosphate-transporting ATPase (3.6.3.27)
306/01041	. . Bis(5'-nucleosyl)-tetraphosphatase (symmetrical) (3.6.1.41)	306/03028	. . Phosphonate-transporting ATPase (3.6.3.28)
306/01042	. . Guanosine-diphosphatase (3.6.1.42)	306/03029	. . Molybdate-transporting ATPase (3.6.3.29)
306/01043	. . Dolichyldiphosphatase (3.6.1.43)	306/0303	. . Fe <sup>3+</sup> -transporting ATPase (3.6.3.30)
306/01044	. . Oligosaccharide-diphosphodolichol diphosphatase (3.6.1.44)	306/03031	. . Polyamine-transporting ATPase (3.6.3.31)
306/01045	. . UDP-sugar diphosphatase (3.6.1.45)	306/03032	. . Quaternary-amine-transporting ATPase (3.6.3.32)
306/01052	. . Diphosphoinositol-polyphosphate diphosphatase (3.6.1.52)	306/03033	. . Vitamin B12-transporting ATPase (3.6.3.33)
306/01053	. . Mn <sup>2+</sup> -dependent ADP-ribose/CDP-alcohol diphosphatase (3.6.1.53)	306/03034	. . Iron-chelate-transporting ATPase (3.6.3.34)
306/01054	. . UDP-2,3-diacylglucosamine diphosphatase (3.6.1.54)	306/03035	. . Manganese-transporting ATPase (3.6.3.35)
306/01055	. . 8-Oxo-dGTP diphosphatase (3.6.1.55)	306/03036	. . Taurine-transporting ATPase (3.6.3.36)
306/01056	. . 2-Hydroxy-dATP diphosphatase (3.6.1.56)	306/03037	. . Guanine-transporting ATPase (3.6.3.37)
306/01057	. . UDP-2,4-diacetamido-2,4,6-trideoxy-beta-L-altropyranose hydrolase (3.6.1.57)	306/03038	. . Capsular-polysaccharide-transporting ATPase (3.6.3.38)
306/01058	. . 8-Oxo-dGDP phosphatase (3.6.1.58)	306/03039	. . Lipopolysaccharide-transporting ATPase (3.6.3.39)
306/01059	. . m7GpppX diphosphatase (3.6.1.59)	306/0304	. . Teichoic-acid-transporting ATPase (3.6.3.40)
306/0106	. . Diadenosine hexaphosphate hydrolase (AMP-forming) (3.6.1.60)	306/03041	. . Heme-transporting ATPase (3.6.3.41)
306/01061	. . Diadenosine hexaphosphate hydrolase (ATP-forming) (3.6.1.61)	306/03042	. . Beta-glucan-transporting ATPase (3.6.3.42)
306/01062	. . m7GpppN-mRNA hydrolase (3.6.1.62)	306/03043	. . Peptide-transporting ATPase (3.6.3.43)
306/01063	. . Alpha-D-ribose 1-methylphosphonate 5-triphosphate diphosphatase (3.6.1.63)	306/03044	. . Xenobiotic-transporting ATPase (3.6.3.44)
306/02	. in sulfonyl-containing anhydrides (3.6.2)	306/03046	. . Cadmium-transporting ATPase (3.6.3.46)
306/02001	. . Adenylylsulfatase (3.6.2.1)	306/03047	. . Fatty-acyl-CoA-transporting ATPase (3.6.3.47)
306/02002	. . Phosphoadenylylsulfatase (3.6.2.2)	306/03048	. . Alpha-factor-transporting ATPase (3.6.3.48)
306/03	. acting on acid anhydrides; catalysing transmembrane movement of substances (3.6.3)	306/03049	. . Channel-conductance-controlling ATPase (3.6.3.49)
306/03001	. . Phospholipid-translocating ATPase (3.6.3.1), i.e. Mg <sup>2+</sup> -ATPase	306/0305	. . Protein-secreting ATPase (3.6.3.50)
306/03002	. . Mg <sup>2+</sup> -importing ATPase (3.6.3.2)	306/03051	. . Mitochondrial protein-transporting ATPase (3.6.3.51)
306/03003	. . Cd <sup>2+</sup> -exporting ATPase (3.6.3.3)	306/03052	. . Chloroplast protein-transporting ATPase (3.6.3.52)
306/03004	. . Cu <sup>2+</sup> -exporting ATPase (3.6.3.4)	306/03053	. . Ag <sup>+</sup> -exporting ATPase (3.6.3.53)
306/03005	. . Zn <sup>2+</sup> -exporting ATPase (3.6.3.5)	306/04	. acting on acid anhydrides; involved in cellular and subcellular movement (3.6.4)
306/03006	. . H <sup>+</sup> -exporting ATPase (3.6.3.6)	306/04001	. . Myosin ATPase (3.6.4.1)
306/03007	. . Na <sup>+</sup> -exporting ATPase (3.6.3.7)	306/04002	. . Dynein ATPase (3.6.4.2)
306/03008	. . Ca <sup>2+</sup> -transporting ATPase (3.6.3.8)	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)
- 307/01007 . . Beta-diketone hydrolase (3.7.1.7)
- 307/01008 . . 2,6-Dioxo-6-phenylhexa-3-enoate hydrolase (3.7.1.8)
- 307/01009 . . 2-Hydroxyumuconate-semialdehyde hydrolase (3.7.1.9)
- 307/0101 . . Cyclohexane-1,3-dione hydrolase (3.7.1.10)
- 307/01011 . . Cyclohexane-1,2-dione hydrolase (3.7.1.11)
- 307/01012 . . Cobalt-precorin 5A hydrolase (3.7.1.12)
- 307/01013 . . 2-Hydroxy-6-oxo-6-(2-aminophenyl)hexa-2,4-dienoate hydrolase (3.7.1.13)
- 307/01014 . . 2-Hydroxy-6-oxonona-2,4-dienedioate hydrolase (3.7.1.14)
- 307/01015 . . (+)-Caryolan-1-ol synthase (3.7.1.15)
- 307/01016 . . Oxepin-CoA hydrolase (3.7.1.16)
- 307/01017 . . 4,5:9,10-Diseco-3-hydroxy-5,9,17-trioxoandrosta-1(10),2-diene-4-oate hydrolase (3.7.1.17)
- 307/01018 . . 6-Oxocamphor hydrolase (3.7.1.18)
- 307/01019 . . 2,6-Dihydroxypseudoxynicotine hydrolase (3.7.1.19)
- 307/0102 . . 3-Fumarylpyruvate hydrolase (3.7.1.20)

### **308/00 Hydrolases acting on halide bonds (3.8)**

- 308/01 . in C-halide substances (3.8.1)
- 308/01001 . . Alkylhalidase (3.8.1.1)
- 308/01002 . . (S)-2-Haloacid dehalogenase (3.8.1.2)
- 308/01003 . . Haloacetate dehalogenase (3.8.1.3)
- 308/01005 . . Haloalkane dehalogenase (3.8.1.5)
- 308/01006 . . 4-Chlorobenzoate dehalogenase (3.8.1.6)
- 308/01007 . . 4-Chlorobenzoyl-CoA dehalogenase (3.8.1.7)
- 308/01008 . . Atrazine chlorohydrolase (3.8.1.8)
- 308/01009 . . (R)-2-Haloacid dehalogenase (3.8.1.9)
- 308/0101 . . 2-Haloacid dehalogenase (configuration-inverting) (3.8.1.10)
- 308/01011 . . 2-Haloacid dehalogenase (configuration-retaining) (3.8.1.11)

### **309/00 Hydrolases acting on phosphorus-nitrogen bonds (3.9)**

- 309/01 . acting on phosphorus-nitrogen bonds (3.9.1)
- 309/01001 . . Phosphoamidase (3.9.1.1)

### **310/00 Hydrolases acting on sulfur-nitrogen bonds (3.10)**

- 310/01 . acting on sulfur-nitrogen bonds (3.10.1)
- 310/01001 . . N-Sulfoglucosamine sulfohydrolase (3.10.1.1)
- 310/01002 . . Cyclamate sulfohydrolase (3.10.1.2)

### **311/00 Hydrolases acting on carbon-phosphorus bonds (3.11)**

- 311/01 . acting on carbon-phosphorus bonds (3.11.1)
- 311/01001 . . Phosphonoacetaldehyde hydrolase (3.11.1.1)
- 311/01002 . . Phosphonoacetate hydrolase (3.11.1.2)
- 311/01003 . . Phosphonopyruvate hydrolase (3.11.1.3)

### **312/00 Hydrolases acting on sulfur-sulfur bonds (3.12)**

- 312/01 . acting on sulfur-sulfur bonds (3.12.1)
- 312/01001 . . Trithionate hydrolase (3.12.1.1)

### **313/00 Hydrolases acting on carbon-sulfur bonds (3.13)**

- 313/01 . acting on carbon-sulfur bonds (3.13.1)
- 313/01001 . . UDP-sulfoquinovose synthase (3.13.1.1)
- 313/01003 . . 2'-Hydroxybiphenyl-2-sulfinate desulfinate (3.13.1.3)

### **401/00 Carbon-carbon lyases (4.1)**

- 401/01 . Carboxy-lyases (4.1.1)
- 401/01001 . . Pyruvate decarboxylase (4.1.1.1)
- 401/01002 . . Oxalate decarboxylase (4.1.1.2)
- 401/01003 . . Oxaloacetate decarboxylase (4.1.1.3)
- 401/01004 . . Acetoacetate decarboxylase (4.1.1.4)
- 401/01005 . . Acetolactate decarboxylase (4.1.1.5)
- 401/01006 . . Aconitate decarboxylase (4.1.1.6)
- 401/01007 . . Benzoylformate decarboxylase (4.1.1.7)
- 401/01008 . . Oxalyl-CoA decarboxylase (4.1.1.8)
- 401/01009 . . Malonyl-CoA decarboxylase (4.1.1.9)
- 401/01011 . . Aspartate 1-decarboxylase (4.1.1.11)
- 401/01012 . . Aspartate 4-decarboxylase (4.1.1.12)
- 401/01014 . . Valine decarboxylase (4.1.1.14)
- 401/01015 . . Glutamate decarboxylase (4.1.1.15)
- 401/01016 . . Hydroxyglutamate decarboxylase (4.1.1.16)
- 401/01017 . . Ornithine decarboxylase (4.1.1.17)
- 401/01018 . . Lysine decarboxylase (4.1.1.18)
- 401/01019 . . Arginine decarboxylase (4.1.1.19)
- 401/0102 . . Diaminopimelate decarboxylase (4.1.1.20)
- 401/01021 . . Phosphoribosylaminoimidazole carboxylase (4.1.1.21)
- 401/01022 . . Histidine decarboxylase (4.1.1.22)
- 401/01023 . . Orotidine-5'-phosphate decarboxylase (4.1.1.23)
- 401/01024 . . Aminobenzoate decarboxylase (4.1.1.24)
- 401/01025 . . Tyrosine decarboxylase (4.1.1.25)
- 401/01028 . . Aromatic-L-amino-acid decarboxylase (4.1.1.28), i.e. tryptophane-decarboxylase
- 401/01029 . . Sulfinoalanine decarboxylase (4.1.1.29)
- 401/0103 . . Pantothenoylcysteine decarboxylase (4.1.1.30)
- 401/01031 . . Phosphoenolpyruvate carboxylase (4.1.1.31)
- 401/01032 . . Phosphoenolpyruvate carboxykinase (GTP) (4.1.1.32)
- 401/01033 . . Diphosphomevalonate decarboxylase (4.1.1.33), i.e. mevalonate-pyrophosphate decarboxylase
- 401/01034 . . Dehydro-L-gulonate decarboxylase (4.1.1.34)
- 401/01035 . . UDP-glucuronate decarboxylase (4.1.1.35), i.e. UDP-D-xylose synthase
- 401/01036 . . Phosphopantothenoylcysteine decarboxylase (4.1.1.36)
- 401/01037 . . Uroporphyrinogen decarboxylase (4.1.1.37)



401/01038	. . Phosphoenolpyruvate carboxykinase (diphosphate) (4.1.1.38)	401/01088	. . Biotin-independent malonate decarboxylase (4.1.1.88)
401/01039	. . Ribulose-bisphosphate carboxylase (4.1.1.39)	401/01089	. . Biotin-dependent malonate decarboxylase (4.1.1.89)
401/0104	. . Hydroxypyruvate decarboxylase (4.1.1.40)	401/0109	. . Peptidyl-glutamate 4-carboxylase (4.1.1.90)
401/01041	. . Methylmalonyl-CoA decarboxylase (4.1.1.41)	401/01091	. . Salicylate decarboxylase (4.1.1.91)
401/01042	. . Carnitine decarboxylase (4.1.1.42)	401/01092	. . Indole-3-carboxylate decarboxylase (4.1.1.92)
401/01043	. . Phenylpyruvate decarboxylase (4.1.1.43)	401/01093	. . Pyrrole-2-carboxylate decarboxylase (4.1.1.93)
401/01044	. . 4-Carboxymuconolactone decarboxylase (4.1.1.44)	401/01094	. . Ethylmalonyl-CoA decarboxylase (4.1.1.94)
401/01045	. . Aminocarboxymuconate-semialdehyde decarboxylase (4.1.1.45)	401/01095	. . L-Glutamyl-[BtrI acyl-carrier protein] decarboxylase (4.1.1.95)
401/01046	. . o-Pyrocatechuate decarboxylase (4.1.1.46)	401/01096	. . Carboxynorspermidine decarboxylase (4.1.1.96)
401/01047	. . Tartronate-semialdehyde synthase (4.1.1.47)	401/02	. . Aldehyde-lyases (4.1.2)
401/01048	. . Indole-3-glycerol-phosphate synthase (4.1.1.48)	401/02002	. . Ketotetrose-phosphate aldolase (4.1.2.2)
401/01049	. . Phosphoenolpyruvate carboxykinase (ATP) (4.1.1.49)	401/02004	. . Deoxyribose-phosphate aldolase (4.1.2.4)
401/0105	. . Adenosylmethionine decarboxylase (4.1.1.50)	401/02005	. . L-Threonine aldolase (4.1.2.5)
401/01051	. . 3-Hydroxy-2-methylpyridine-4,5-dicarboxylate 4-decarboxylase (4.1.1.51)	401/02008	. . Indole-3-glycerol-phosphate lyase (4.1.2.8)
401/01052	. . 6-Methylsalicylate decarboxylase (4.1.1.52)	401/02009	. . Phosphoketolase (4.1.2.9)
401/01053	. . Phenylalanine decarboxylase (4.1.1.53)	401/0201	. . (R)-Mandelonitrile lyase (4.1.2.10)
401/01054	. . Dihydroxyfumarate decarboxylase (4.1.1.54)	401/02011	. . Hydroxymandelonitrile lyase (4.1.2.11)
401/01055	. . 4,5-Dihydroxyphthalate decarboxylase (4.1.1.55)	401/02012	. . 2-Dehydropantoate aldolase (4.1.2.12), i.e. ketopantoaldolase
401/01056	. . 3-Oxolaurate decarboxylase (4.1.1.56)	401/02013	. . Fructose-bisphosphate aldolase (4.1.2.13)
401/01057	. . Methionine decarboxylase (4.1.1.57)	401/02014	. . 2-Dehydro-3-deoxy-phosphogluconate aldolase (4.1.2.14)
401/01058	. . Orsellinate decarboxylase (4.1.1.58)	401/02017	. . L-Fucose-phosphate aldolase (4.1.2.17)
401/01059	. . Gallate decarboxylase (4.1.1.59)	401/02018	. . 2-Dehydro-3-deoxy-L-pentionate aldolase (4.1.2.18)
401/0106	. . Stipitatonate decarboxylase (4.1.1.60)	401/02019	. . Rhamnulose-1-phosphate aldolase (4.1.2.19)
401/01061	. . 4-Hydroxybenzoate decarboxylase (4.1.1.61)	401/0202	. . 2-Dehydro-3-deoxyglucarate aldolase (4.1.2.20)
401/01062	. . Gentisate decarboxylase (4.1.1.62)	401/02021	. . 2-Dehydro-3-deoxy-6-phosphogalactonate aldolase (4.1.2.21)
401/01063	. . Protocatechuate decarboxylase (4.1.1.63)	401/02022	. . Fructose-6-phosphate phosphoketolase (4.1.2.22)
401/01064	. . 2,2-Dialkylglycine decarboxylase (pyruvate) (4.1.1.64)	401/02023	. . 3-Deoxy-D-manno-octulosonate aldolase (4.1.2.23)
401/01065	. . Phosphatidylserine decarboxylase (4.1.1.65)	401/02024	. . Dimethylaniline-N-oxide aldolase (4.1.2.24)
401/01066	. . Uracil-5-carboxylate decarboxylase (4.1.1.66)	401/02025	. . Dihydroneopterin aldolase (4.1.2.25)
401/01067	. . UDP-galacturonate decarboxylase (4.1.1.67)	401/02026	. . Phenylserine aldolase (4.1.2.26)
401/01068	. . 5-Oxopent-3-ene-1,2,5-tricarboxylate decarboxylase (4.1.1.68)	401/02027	. . Sphinganine-1-phosphate aldolase (4.1.2.27)
401/01069	. . 3,4-Dihydroxyphthalate decarboxylase (4.1.1.69)	401/02028	. . 2-Dehydro-3-deoxy-D-pentionate aldolase (4.1.2.28)
401/0107	. . Glutaconyl-CoA decarboxylase (4.1.1.70)	401/02029	. . 5-Dehydro-2-deoxyphosphogluconate aldolase (4.1.2.29)
401/01071	. . 2-Oxoglutarate decarboxylase (4.1.1.71)	401/0203	. . 17-Alpha-hydroxyprogesterone aldolase (4.1.2.30)
401/01072	. . Branched-chain-2-oxoacid decarboxylase (4.1.1.72)	401/02032	. . Trimethylamine-oxide aldolase (4.1.2.32)
401/01073	. . Tartrate decarboxylase (4.1.1.73)	401/02033	. . Fucosterol-epoxide lyase (4.1.2.33)
401/01074	. . Indolepyruvate decarboxylase (4.1.1.74)	401/02034	. . 4-(2-carboxyphenyl)-2-oxobut-3-enoate aldolase (4.1.2.34)
401/01075	. . 5-Guanidino-2-oxopentanoate decarboxylase (4.1.1.75)	401/02035	. . Propionin synthase (4.1.2.35)
401/01076	. . Arylmalonate decarboxylase (4.1.1.76)	401/02036	. . Lactate aldolase (4.1.2.36)
401/01077	. . 2-Oxo-3-hexenedioate decarboxylase (4.1.1.77)	401/02037	. . Hydroxynitrilase (4.1.2.37) ( <a href="#">C12Y 401/02046</a> , <a href="#">C12Y 401/02047</a> take precedence)
401/01078	. . Acetylenedicarboxylate decarboxylase (4.1.1.78)	401/02038	. . Benzoin aldolase (4.1.2.38)
401/01079	. . Sulfopyruvate decarboxylase (4.1.1.79)	401/0204	. . Tagatose-bisphosphate aldolase (4.1.2.40)
401/0108	. . 4-Hydroxyphenylpyruvate decarboxylase (4.1.1.80)	401/02041	. . Vanillin synthase (4.1.2.41)
401/01081	. . Threonine-phosphate decarboxylase (4.1.1.81)	401/02042	. . D-Threonine aldolase (4.1.2.42)
401/01082	. . Phosphonopyruvate decarboxylase (4.1.1.82)	401/02043	. . 3-Hexulose-6-phosphate synthase (4.1.2.43)
401/01083	. . 4-Hydroxyphenylacetate decarboxylase (4.1.1.83)	401/02044	. . Benzoyl-CoA-dihydrodiol lyase (4.1.2.44)
401/01084	. . D-Dopachrome decarboxylase (4.1.1.84)	401/02045	. . Trans-o-hydroxybenzylidenepyruvate hydratase-aldolase (4.1.2.45)
401/01085	. . 3-Dehydro-L-gulonate-6-phosphate decarboxylase (4.1.1.85)	401/02046	. . Aliphatic (R)-hydroxynitrile lyase (4.1.2.46)
401/01086	. . Diaminobutyrate decarboxylase (4.1.1.86)		
401/01087	. . Malonyl-S-ACP decarboxylase (4.1.1.87)		

401/02047	. . (S)-Hydroxynitrile lyase (4.1.2.47)	402/01011	. . Phosphopyruvate hydratase (4.2.1.11), i.e. enolase
401/02048	. . Low-specificity L-threonine aldolase (4.1.2.48)	402/01012	. . Phosphogluconate dehydratase (4.2.1.12)
401/02049	. . L-Allo-threonine aldolase (4.1.2.49)	402/01017	. . Enoyl-CoA hydratase (4.2.1.17), i.e. crotonase
401/0205	. . 6-Carboxytetrahydropterin synthase (4.1.2.50)	402/01018	. . Methylglutaconyl-CoA hydratase (4.2.1.18)
401/03	. . Oxo-acid-lyases (4.1.3)	402/01019	. . Imidazoleglycerol-phosphate dehydratase (4.2.1.19)
401/03001	. . Isocitrate lyase (4.1.3.1)	402/0102	. . Tryptophan synthase (4.2.1.20)
401/03003	. . N-Acetylneuraminate lyase (4.1.3.3)	402/01022	. . Cystathionine beta-synthase (4.2.1.22)
401/03004	. . Hydroxymethylglutaryl-CoA lyase (4.1.3.4)	402/01024	. . Porphobilinogen synthase (4.2.1.24)
401/03006	. . Citrate (pro-3S)-lyase (4.1.3.6)	402/01025	. . L-Arabinonate dehydratase (4.2.1.25)
401/03013	. . Oxalomalate lyase (4.1.3.13)	402/01027	. . Acetylenecarboxylate hydratase (4.2.1.27)
401/03014	. . L-Erythro-3-hydroxyaspartate aldolase (4.1.3.14)	402/01028	. . Propanediol dehydratase (4.2.1.28)
401/03016	. . 4-Hydroxy-2-oxoglutarate aldolase (4.1.3.16)	402/0103	. . Glycerol dehydratase (4.2.1.30)
401/03017	. . 4-Hydroxy-4-methyl-2-oxoglutarate aldolase (4.1.3.17)	402/01031	. . Maleate hydratase (4.2.1.31)
401/03022	. . Citramalate lyase (4.1.3.22)	402/01032	. . L(+)-Tartrate dehydratase (4.2.1.32)
401/03024	. . Malyl-CoA lyase (4.1.3.24)	402/01033	. . 3-Isopropylmalate dehydratase (4.2.1.33)
401/03025	. . Citramalyl-CoA lyase (4.1.3.25)	402/01034	. . (S)-2-Methylmalate dehydratase (4.2.1.34)
401/03026	. . 3-Hydroxy-3-isohexenylglutaryl-CoA lyase (4.1.3.26)	402/01035	. . (R)-2-Methylmalate dehydratase (4.2.1.35)
401/03027	. . Anthranilate synthase (4.1.3.27)	402/01036	. . Homoaconitate hydratase (4.2.1.36)
401/0303	. . Methylisocitrate lyase (4.1.3.30)	402/01039	. . Gluconate dehydratase (4.2.1.39)
401/03032	. . 2,3-Dimethylmalate lyase (4.1.3.32)	402/0104	. . Glucarate dehydratase (4.2.1.40)
401/03034	. . Citryl-CoA lyase (4.1.3.34)	402/01041	. . 5-Dehydro-4-deoxyglucarate dehydratase (4.2.1.41)
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	. . Pseudouridyate 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-enoyl-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-Dehydroquininate dehydratase (4.2.1.10)	402/0108	. . 2-Oxopent-4-enoate hydratase (4.2.1.80)
		402/01081	. . D(-)-tartrate dehydratase (4.2.1.81)
		402/01082	. . Xylonate dehydratase (4.2.1.82)
		402/01083	. . 4-Oxalmesaconate hydratase (4.2.1.83)

- 402/01084 . . Nitrile hydratase (4.2.1.84)
- 402/01085 . . Dimethylmaleate hydratase (4.2.1.85)
- 402/01087 . . Octopamine dehydratase (4.2.1.87)
- 402/01088 . . Synephrine dehydratase (4.2.1.88)
- 402/01089 . . Carnitine dehydratase (4.2.1.89)
- 402/0109 . . L-Rhamnonate dehydratase (4.2.1.90)
- 402/01091 . . Arogenate dehydratase (4.2.1.91)
- 402/01092 . . Hydroperoxide dehydratase (4.2.1.92)
- 402/01093 . . ATP-dependent NAD(P)H-hydrate dehydratase (4.2.1.93)
- 402/01094 . . Scytalone dehydratase (4.2.1.94)
- 402/01095 . . Kievitone hydratase (4.2.1.95)
- 402/01096 . . 4a-Hydroxytetrahydrobiopterin dehydratase (4.2.1.96)
- 402/01097 . . Phaseollidin hydratase (4.2.1.97)
- 402/01098 . . 16-Alpha-hydroxyprogesterone dehydratase (4.2.1.98)
- 402/01099 . . 2-Methylisocitrate dehydratase (4.2.1.99)
- 402/011 . . Cyclohexa-1,5-dienecarbonyl-CoA hydratase (4.2.1.100)
- 402/01101 . . Trans-feruloyl-CoA hydratase (4.2.1.101)
- 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)
- 402/01107 . . 3-Alpha,7-alpha,12-alpha-trihydroxy-5-beta-cholest-24-enoyl-CoA hydratase (4.2.1.107)
- 402/01108 . . Ectoine synthase (4.2.1.108)
- 402/01109 . . Methylthioribulose 1-phosphate dehydratase (4.2.1.109)
- 402/0111 . . Aldos-2-ulose dehydratase (4.2.1.110)
- 402/01111 . . 1,5-Anhydro-D-fructose dehydratase (4.2.1.111)
- 402/01112 . . Acetylene hydratase (4.2.1.112)
- 402/01113 . . o-Succinylbenzoate synthase (4.2.1.113)
- 402/01114 . . Methanogen homoaconitase (4.2.1.114)
- 402/01115 . . UDP-N-acetylglucosamine 4,6-dehydratase (inverting) (4.2.1.115)
- 402/01116 . . 3-Hydroxypropionyl-CoA dehydratase (4.2.1.116)
- 402/01117 . . 2-Methylcitrate dehydratase (2-methyl-trans-aconitate forming)(4.2.1.117)
- 402/01118 . . 3-Dehydroshikimate dehydratase (4.2.1.118)
- 402/01119 . . Enoyl-CoA hydratase 2 (4.2.1.119)
- 402/0112 . . 4-Hydroxybutanoyl-CoA dehydratase (4.2.1.120)
- 402/01121 . . Colneleate synthase (4.2.1.121)
- 402/01122 . . Tryptophan synthase (indole-salvaging) (4.2.1.122)
- 402/01123 . . Tetrahymanol synthase (4.2.1.123)
- 402/01124 . . Arabidiol synthase (4.2.1.124)
- 402/01125 . . Dammarenediol II synthase (4.2.1.125)
- 402/01126 . . N-Acetylmuramic acid 6-phosphate etherase (4.2.1.126)
- 402/01127 . . Linalool dehydratase (4.2.1.127)
- 402/01128 . . Lupan-3-beta,20-diol synthase (4.2.1.128)
- 402/01129 . . Squalene--hopanol cyclase (4.2.1.129)
- 402/0113 . . D-Lactate dehydratase (4.2.1.130)
- 402/01131 . . Carotenoid 1,2-hydratase (4.2.1.131)
- 402/01132 . . 2-Hydroxyhexa-2,4-dienoate hydratase (4.2.1.132)
- 402/01133 . . Copal-8-ol diphosphate hydratase (4.2.1.133)
- 402/01134 . . Very-long-chain (3R)-3-hydroxyacyl-[acyl-carrier protein] dehydratase (4.2.1.134)
- 402/01135 . . UDP-N-acetylglucosamine 4,6-dehydratase (configuration-retaining) (4.2.1.135)
- 402/01136 . . ADP-dependent NAD(P)H-hydrate dehydratase (4.2.1.136)
- 402/01137 . . Sporulenol synthase (4.2.1.137)
- 402/02 . . acting on polysaccharides (4.2.2)
- 402/02001 . . Hyaluronate lyase (4.2.2.1)
- 402/02002 . . Pectate lyase (4.2.2.2)
- 402/02003 . . Poly(beta-D-mannuronate) lyase (4.2.2.3)
- 402/02004 . . Chondroitin ABC lyase (4.2.2.4), i.e. chondroitinase ([C12Y 402/0202](#), [C12Y 402/02021](#) take precedence)
- 402/02005 . . Chondroitin AC lyase (4.2.2.5)
- 402/02006 . . Oligogalacturonide lyase (4.2.2.6)
- 402/02007 . . Heparin lyase (4.2.2.7), i.e. heparinase I
- 402/02008 . . Heparin-sulfate lyase (4.2.2.8)
- 402/02009 . . Pectate disaccharide-lyase (4.2.2.9)
- 402/0201 . . Pectin lyase (4.2.2.10)
- 402/02011 . . Poly(alpha-L-guluronate) lyase (4.2.2.11), i.e. alginase II
- 402/02012 . . Xanthan lyase (4.2.2.12)
- 402/02013 . . Exo-(1->4)-alpha-D-glucan lyase (4.2.2.13)
- 402/02014 . . Glucuronan lyase (4.2.2.14)
- 402/02015 . . Anhydrosialidase (4.2.2.15)
- 402/02016 . . Levan fructotransferase (DFA-IV-forming) (4.2.2.16)
- 402/02017 . . Inulin fructotransferase (DFA-I-forming) (4.2.2.17)
- 402/02018 . . Inulin fructotransferase (DFA-III-forming) (4.2.2.18)
- 402/02019 . . Chondroitin B lyase (4.2.2.19)
- 402/0202 . . Chondroitin-sulfate-ABC endolyase (4.2.2.20)
- 402/02021 . . Chondroitin-sulfate-ABC exolyase (4.2.2.21)
- 402/02022 . . Pectate trisaccharide-lyase (4.2.2.22)
- 402/02023 . . Rhamnogalacturonan endolyase (4.2.2.23)
- 402/02024 . . Rhamnogalacturonan exolyase (4.2.2.24)
- 402/02025 . . Gellan lyase (4.2.2.25)
- 402/03 . . acting on phosphates (4.2.3)
- 402/03001 . . Threonine synthase (4.2.3.1)
- 402/03002 . . Ethanolamine-phosphate phospho-lyase (4.2.3.2)
- 402/03003 . . Methylglyoxal synthase (4.2.3.3)
- 402/03004 . . 3-Dehydroquininate synthase (4.2.3.4)
- 402/03005 . . Chorismate synthase (4.2.3.5)
- 402/03006 . . Trichodiene synthase (4.2.3.6)
- 402/03007 . . Pentalenene synthase (4.2.3.7)
- 402/03008 . . Casbene synthase (4.2.3.8)
- 402/03009 . . Aristolochene synthase (4.2.3.9)
- 402/0301 . . (-)-Endo-fenchol synthase (4.2.3.10)
- 402/03011 . . Sabinene-hydrate synthase (4.2.3.11)
- 402/03012 . . 6-Pyruvoyltetrahydropterin synthase (4.2.3.12)
- 402/03013 . . (+)-Delta-cadinene synthase (4.2.3.13)
- 402/03014 . . Pinene synthase (4.2.3.14) ([C12Y 402/03119](#) and [C12Y 402/0312](#) take precedence)
- 402/03015 . . Myrcene synthase (4.2.3.15)
- 402/03016 . . (4S)-Limonene synthase (4.2.3.16)
- 402/03017 . . Taxadiene synthase (4.2.3.17)
- 402/03018 . . Abieta-7,13-diene synthase (4.2.3.18)
- 402/03019 . . Ent-kaurene synthase (4.2.3.19)
- 402/0302 . . (R)-Limonene synthase (4.2.3.20)
- 402/03021 . . Vetispiradiene synthase (4.2.3.21)
- 402/03022 . . Germacradienol synthase (4.2.3.22)
- 402/03023 . . Germacrene-A synthase (4.2.3.23)

402/03024	. .	Amorpha-4,11-diene synthase (4.2.3.24)	402/0308	. .	Alpha-longipinene synthase (4.2.3.80)
402/03025	. .	S-Linalool synthase (4.2.3.25)	402/03081	. .	Exo-alpha-bergamotene synthase (4.2.3.81)
402/03026	. .	R-Linalool synthase (4.2.3.26)	402/03082	. .	Alpha-santalene synthase (4.2.3.82)
402/03027	. .	Isoprene synthase (4.2.3.27)	402/03083	. .	Beta-santalene synthase (4.2.3.83)
402/03028	. .	Ent-cassa-12,15-diene synthase (4.2.3.28)	402/03084	. .	10-Epi-gamma-eudesmol synthase (4.2.3.84)
402/03029	. .	Ent-sandaracopimaradiene synthase (4.2.3.29)	402/03085	. .	Alpha-eudesmol synthase (4.2.3.85)
402/0303	. .	Ent-pimara-8(14),15-diene synthase (4.2.3.30)	402/03086	. .	7-Epi-alpha-selinene synthase (4.2.3.86)
402/03031	. .	Ent-pimara-9(11),15-diene synthase (4.2.3.31)	402/03087	. .	Alpha-guaiene synthase (4.2.3.87)
402/03032	. .	Levopimaradiene synthase (4.2.3.32)	402/03088	. .	Viridiflorene synthase (4.2.3.88)
402/03033	. .	Stemar-13-ene synthase (4.2.3.33)	402/03089	. .	(+)-Beta-caryophyllene synthase (4.2.3.89)
402/03034	. .	Stemod-13(17)-ene synthase (4.2.3.34)	402/0309	. .	5-Epi-alpha-selinene synthase (4.2.3.90)
402/03035	. .	Syn-pimara-7,15-diene synthase (4.2.3.35)	402/03091	. .	Cubebol synthase (4.2.3.91)
402/03036	. .	Terpentetriene synthase (4.2.3.36)	402/03092	. .	(+)-Gamma-cadinene synthase (4.2.3.92)
402/03037	. .	Epi-isozaene synthase (4.2.3.37)	402/03093	. .	Delta-guaiene synthase (4.2.3.93)
402/03038	. .	Alpha-bisabolene synthase (4.2.3.38)	402/03094	. .	Gamma-curcumenene synthase (4.2.3.94)
402/03039	. .	Epi-cedrol synthase (4.2.3.39)	402/03095	. .	(-)-Alpha-cuprenene synthase (4.2.3.95)
402/0304	. .	(Z)-Gamma-bisabolene synthase (4.2.3.40)	402/03096	. .	Avermitilol synthase (4.2.3.96)
402/03041	. .	Elisabethatriene synthase (4.2.3.41)	402/03097	. .	(-)-Delta-cadinene synthase (4.2.3.97)
402/03042	. .	Aphidicolan-16-beta-ol synthase (4.2.3.42)	402/03098	. .	(+)-T-Muurolool synthase (4.2.3.98)
402/03043	. .	Fusicocca-2,10(14)-diene synthase (4.2.3.43)	402/03099	. .	Labdatriene synthase (4.2.3.99)
402/03044	. .	Isopimara-7,15-diene synthase (4.2.3.44)	402/031	. .	Bicyclogermacrene synthase (4.2.3.100)
402/03045	. .	Phyllocladan-16-alpha-ol synthase (4.2.3.45)	402/03101	. .	7-Epi-sesquithujene synthase (4.2.3.101)
402/03046	. .	Alpha-farnesene synthase (4.2.3.46)	402/03102	. .	Sesquithujene synthase (4.2.3.102)
402/03047	. .	Beta-farnesene synthase (4.2.3.47)	402/03103	. .	Ent-isokaurene synthase (4.2.3.103)
402/03048	. .	(3S,6E)-Nerolidol synthase (4.2.3.48)	402/03104	. .	Alpha-humulene synthase (4.2.3.104)
402/03049	. .	(3R,6E)-Nerolidol synthase (4.2.3.49)	402/03105	. .	Tricyclene synthase (4.2.3.105)
402/0305	. .	(+)-Alpha-santalene synthase ((2Z,6Z)-farnesyl diphosphate cyclizing)(4.2.3.50)	402/03106	. .	(E)-Beta-ocimene synthase (4.2.3.106)
402/03051	. .	Beta-phellandrene synthase (neryl-diphosphate-cyclizing) (4.2.3.51)	402/03107	. .	(+)-Car-3-ene synthase (4.2.3.107)
402/03052	. .	(4S)-Beta-phellandrene synthase (geranyl-diphosphate-cyclizing) (4.2.3.52)	402/03108	. .	1,8-Cineole synthase (4.2.3.108)
402/03053	. .	(+)-Endo-beta-bergamotene synthase ((2Z,6Z)-farnesyl diphosphate cyclizing)(4.2.3.53)	402/03109	. .	(-)-Sabinene synthase (4.2.3.109)
402/03054	. .	(-)-Endo-alpha-bergamotene synthase ((2Z,6Z)-farnesyl diphosphate cyclizing)(4.2.3.54)	402/0311	. .	(+)-Sabinene synthase (4.2.3.110)
402/03055	. .	(S)-Beta-bisabolene synthase (4.2.3.55)	402/03111	. .	(-)-Alpha-terpineol synthase (4.2.3.111)
402/03056	. .	Gamma-humulene synthase (4.2.3.56)	402/03112	. .	(+)-Alpha-terpineol synthase (4.2.3.112)
402/03057	. .	Beta-caryophyllene synthase (4.2.3.57)	402/03113	. .	Terpinolene synthase (4.2.3.113)
402/03058	. .	Longifolene synthase (4.2.3.58)	402/03114	. .	Gamma-terpinene synthase (4.2.3.114)
402/03059	. .	(E)-Gamma-bisabolene synthase (4.2.3.59)	402/03115	. .	Alpha-terpinene synthase (4.2.3.115)
402/0306	. .	Germacrene C synthase (4.2.3.60)	402/03116	. .	(+)-Camphene synthase (4.2.3.116)
402/03061	. .	5-Epiaristolochene synthase (4.2.3.61)	402/03117	. .	(-)-Camphene synthase (4.2.3.117)
402/03062	. .	(-)-Gamma-cadinene synthase ((2Z,6E)-farnesyl diphosphate cyclizing)(4.2.3.62)	402/03118	. .	2-Methylisoborneol synthase (4.2.3.118)
402/03063	. .	(+)-Cubenene synthase (4.2.3.63)	402/03119	. .	(-)-Alpha-pinene synthase (4.2.3.119)
402/03064	. .	(+)-Epicubenol synthase (4.2.3.64)	402/0312	. .	(-)-Beta-pinene synthase (4.2.3.120)
402/03065	. .	Zingiberene synthase (4.2.3.65)	402/03121	. .	(+)-Alpha-pinene synthase (4.2.3.121)
402/03066	. .	Beta-selinene cyclase (4.2.3.66)	402/03122	. .	Beta-pinene synthase (4.2.3.122)
402/03067	. .	Cis-muuroadiene synthase (4.2.3.67)	402/03123	. .	Beta-sesquiphellandrene synthase (4.2.3.123)
402/03068	. .	Beta-eudesmol synthase (4.2.3.68)	402/03124	. .	2-Deoxy-scylo-inosose synthase (4.2.3.124)
402/03069	. .	(+)-Alpha-barbatene synthase (4.2.3.69)	402/03125	. .	Alpha-muurolene synthase (4.2.3.125)
402/0307	. .	Patchoulol synthase (4.2.3.70)	402/03126	. .	Gamma-muurolene synthase (4.2.3.126)
402/03071	. .	(E,E)-Germacrene B synthase (4.2.3.71)	402/03127	. .	Beta-copaene synthase (4.2.3.127)
402/03072	. .	Alpha-gurjunene synthase (4.2.3.72)	402/03128	. .	Beta-cubebene synthase (4.2.3.128)
402/03073	. .	Valencene synthase (4.2.3.73)	402/03129	. .	(+)-Sativene synthase (4.2.3.129)
402/03074	. .	Presilphiperfolanol synthase (4.2.3.74)	402/0313	. .	Tetraprenyl-beta-curcumenene synthase (4.2.3.130)
402/03075	. .	(-)-Germacrene D synthase (4.2.3.75)	402/03131	. .	Miltiradiene synthase (4.2.3.131)
402/03076	. .	(+)-Delta-selinene synthase (4.2.3.76)	402/03132	. .	Neoabietadiene synthase (4.2.3.132)
402/03077	. .	(+)-Germacrene D synthase (4.2.3.77)	402/03133	. .	Alpha-copaene synthase (4.2.3.133)
402/03078	. .	Beta-chamigrene synthase (4.2.3.78)	402/03134	. .	5-Phosphonoxy-L-lysine phospho-lyase (4.2.3.134)
402/03079	. .	Thujopsene synthase (4.2.3.79)	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-Aminobutyryl-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-Ketoalidoxylamine 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 . . Furfurylformamide 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-amyrin synthase (5.4.99.39)  
 504/9904 . . Alpha-amyrin 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 . . Glutinol 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-amyrin synthase (5.4.99.52)  
 504/99053 . . Marneral synthase (5.4.99.53)  
 504/99054 . . Beta-seco-amyrin synthase (5.4.99.54)  
 504/99055 . . Delta amyrin 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 . . Cycloeucaleenol 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-macrocaryene 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-tRNA<sup>Pyl</sup> 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)  
 603/01012 . . D-Aspartate ligase (6.3.1.12)  
 603/01013 . . L-Cysteine:1D-myo-inositol 2-amino-2-deoxy-alpha-D-glucopyranoside ligase (6.3.1.13)  
 603/01014 . . Diphthine--ammonia ligase (6.3.1.14)  
 603/02 . . Acid—amino-acid ligases (peptide synthases)(6.3.2)  
 603/02001 . . Pantoate-beta-alanine ligase (6.3.2.1)  
 603/02002 . . Glutamate-cysteine ligase (6.3.2.2)  
 603/02003 . . Glutathione synthase (6.3.2.3)  
 603/02004 . . D-Alanine-D-alanine ligase (6.3.2.4)  
 603/02005 . . Phosphopantothenate--cysteine ligase (6.3.2.5)  
 603/02006 . . Phosphoribosylaminoimidazolesuccinocarboxamide synthase (6.3.2.6)  
 603/02007 . . UDP-N-acetylmuramoyl-L-alanyl-D-glutamate--L-lysine ligase (6.3.2.7)  
 603/02008 . . UDP-N-acetylmuramate-L-alanine ligase (6.3.2.8)  
 603/02009 . . UDP-N-acetylmuramoyl-L-alanine-D-glutamate ligase (6.3.2.9)  
 603/0201 . . UDP-N-acetylmuramoyl-tripeptide-D-alanyl-D-alanine ligase (6.3.2.10)  
 603/02011 . . Carnosine synthase (6.3.2.11)  
 603/02012 . . Dihydrofolate synthase (6.3.2.12)  
 603/02013 . . UDP-N-acetylmuramoyl-L-alanyl-D-glutamate-2,6-diaminopimelate ligase (6.3.2.13)  
 603/02014 . . 2,3-Dihydroxybenzoate--serine ligase (6.3.2.14)  
 603/02016 . . D-Alanine--alanyl-poly(glycerolphosphate) ligase (6.3.2.16)  
 603/02017 . . Tetrahydrofolate synthase (6.3.2.17)  
 603/02018 . . Gamma-glutamylhistamine synthase (6.3.2.18)  
 603/02019 . . Ubiquitin-protein ligase (6.3.2.19), i.e. ubiquitin-conjugating enzyme  
 603/0202 . . Indoleacetate--lysine synthetase (6.3.2.20)  
 603/02021 . . Ubiquitin--calmodulin ligase (6.3.2.21)  
 603/02023 . . Homoglutathione synthase (6.3.2.23)  
 603/02024 . . Tyrosine--arginine ligase (6.3.2.24)  
 603/02025 . . Tubulin-tyrosine ligase (6.3.2.25)  
 603/02026 . . N-(5-Amino-5-carboxypentanoyl)-L-cysteinyl-D-valine synthase (6.3.2.26)  
 603/02028 . . L-Amino-acid alpha-ligase (6.3.2.28)  
 603/02029 . . Cyanophycin synthase (L-aspartate-adding) (6.3.2.29)  
 603/0203 . . Cyanophycin synthase (L-arginine-adding) (6.3.2.30)  
 603/02031 . . Coenzyme F420-0:L-glutamate ligase (6.3.2.31)  
 603/02032 . . Coenzyme gamma-F420-2:alpha-L-glutamate ligase (6.3.2.32)  
 603/02033 . . Tetrahydrosarcinapterin synthase (6.3.2.33)  
 603/02034 . . Coenzyme F420-1:gamma-L-glutamate ligase (6.3.2.34)  
 603/02035 . . D-Alanine--D-serine ligase (6.3.2.35)  
 603/02036 . . 4-Phosphopantoate--beta-alanine ligase (6.3.2.36)  
 603/02037 . . UDP-N-acetylmuramoyl-L-alanyl-D-glutamate--D-lysine ligase (6.3.2.37)  
 603/02038 . . N2-Citryl-N6-acetyl-N6-hydroxylysine synthase (6.3.2.38)  
 603/02039 . . Aerobactin synthase (6.3.2.39)  
 603/03 . . Cyclo-ligases (6.3.3)  
 603/03001 . . Phosphoribosylformylglycinamidine cyclo-ligase (6.3.3.1)  
 603/03002 . . 5-Formyltetrahydrofolate cyclo-ligase (6.3.3.2)  
 603/03003 . . Dethiobiotin synthase (6.3.3.3)  
 603/03004 . . (Carboxyethyl)arginine beta-lactam-synthase (6.3.3.4)  
 603/04 . . Other carbon-nitrogen ligases (6.3.4)  
 603/04001 . . GMP synthase (6.3.4.1)  
 603/04002 . . CTP synthase (6.3.4.2)  
 603/04003 . . Formate--tetrahydrofolate ligase (6.3.4.3)  
 603/04004 . . Adenylosuccinate synthase (6.3.4.4)  
 603/04005 . . Argininosuccinate synthase (6.3.4.5)  
 603/04006 . . Urea carboxylase (6.3.4.6)  
 603/04007 . . Ribose-5-phosphate--ammonia ligase (6.3.4.7)  
 603/04008 . . Imidazoleacetate--phosphoribosyldiphosphate ligase (6.3.4.8)  
 603/04009 . . Biotin--[methylmalonyl-CoA-carboxytransferase] ligase (6.3.4.9)  
 603/0401 . . Biotin--[propionyl-CoA-carboxylase (ATP-hydrolyzing)] ligase (6.3.4.10)  
 603/04011 . . Biotin--[methylcrotonoyl-CoA-carboxylase] ligase (6.3.4.11)  
 603/04012 . . Glutamate--methylamine ligase (6.3.4.12)  
 603/04013 . . Phosphoribosylamine-glycine ligase (6.3.4.13)  
 603/04014 . . Biotin carboxylase (6.3.4.14)  
 603/04015 . . Biotin-[acetyl-CoA-carboxylase] ligase (6.3.4.15)  
 603/04016 . . Carbamoyl-phosphate synthase (ammonia) (6.3.4.16)  
 603/04017 . . Formate--dihydrofolate ligase (6.3.4.17)  
 603/04018 . . 5-(Carboxyamino)imidazole ribonucleotide synthase (6.3.4.18)  
 603/04019 . . tRNA(Ile)-lysine synthetase (6.3.4.19)  
 603/0402 . . 7-Cyano-7-deazaguanine synthase (6.3.4.20)  
 603/05 . . Carbon-nitrogen ligases with glutamine as amido-N-donor (6.3.5)  
 603/05001 . . NAD<sup>+</sup> synthase (glutamine-hydrolyzing) (6.3.5.1)  
 603/05002 . . GMP synthase (glutamine-hydrolysing) (6.3.5.2), i.e. glutamine amidotransferase  
 603/05003 . . Phosphoribosylformylglycinamidine synthase (6.3.5.3)

- 603/05004 . . Asparagine synthase (glutamine-hydrolyzing) (6.3.5.4)
- 603/05005 . . Carbamoyl-phosphate synthase (glutamine-hydrolysing) (6.3.5.5)
- 603/05006 . . Asparaginyl-tRNA synthase (glutamine-hydrolyzing) (6.3.5.6)
- 603/05007 . . Glutaminyl-tRNA synthase (glutamine-hydrolyzing) (6.3.5.7)
- 603/05009 . . Hydrogenobyrinic acid a,c-diamide synthase (glutamine-hydrolyzing) (6.3.5.9)
- 603/0501 . . Adenosylcobyrinic acid synthase (glutamine-hydrolyzing) (6.3.5.10)
- 603/05011 . . Cobyrinate a,c-diamide synthase (glutamine-hydrolyzing) (6.3.5.11)

**604/00      Ligases forming carbon-carbon bonds (6.4)**

- 604/01 . . Ligases forming carbon-carbon bonds (6.4.1)
- 604/01001 . . Pyruvate carboxylase (6.4.1.1)
- 604/01002 . . Acetyl-CoA carboxylase (6.4.1.2)
- 604/01003 . . Propionyl-CoA carboxylase (6.4.1.3)
- 604/01004 . . Methylcrotonoyl-CoA carboxylase (6.4.1.4)
- 604/01005 . . Geranoyl-CoA carboxylase (6.4.1.5)
- 604/01006 . . Acetone carboxylase (6.4.1.6)
- 604/01007 . . 2-Oxoglutarate carboxylase (6.4.1.7)
- 604/01008 . . Acetophenone carboxylase (6.4.1.8)

**605/00      Ligases forming phosphoric ester bonds (6.5)**

- 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 . . Cobaltochelataase (6.6.1.2)