

Metabolic Kit Catalog

Pathways Kit A

6-Diaminopimelate
 2,6-Diam.-D-Alanyl-D-Alan.
 Biosynthesis
 Isoleucine Biosynthesis
 1,2,4-Trichloro Benz. Path.
 2,3-Dihydrodipicolinate
 2,3,4,5-Tetrahydro-Dipicol.
 2,4,5-Trich.-Phenoxya. Path.
 2,4-Dichlorobenzoate Degrad.
 2,5-Diamino-Hexanoate
 2,6-Diaminopimelate
 2-Amino-3-Oxohexanoate
 2-Oxo-6-Amino-Caproate
 2-Oxoadipate
 2-Oxo-Glutarate
 3-Chloroacrylic Acid Degrad.
 5-Adenyl-2-Amino adipate
 5-Adenyl-2-Amino-Adppa.
 Acetyl-CoA
 Alanine/Aspartate Metabo.
 Alanine Metabolism
 Alkaloid Biosynthesis I
 Alkaloid Biosynthesis II
 Amino Acid Metabolism
 Aspartate Metabolism
 Aminophosphonate Meta.
 Aminosugars Metabolism
 Arginine/Proline Metabo.
 Arginine Metabolism
 Ascorbate/Aldarate Meta.
 Ascorbate Metabolism
 B-Alanine Metabolism
 Beta-Lactam Resistance
 Bile Acid Biosynthesis
 Biotin Metabolism
 Butanoate Metabolism
 C21 Steroid Horm. Meta.
 C4-Dicarboxyl. Acid Cyc.
 C5-Branch. Dibasic Acid Met.
 Carbon Fixation
 Carotenoids Biosynthesis
 Choris., Aro. Amin. Acid Bio.
 Citrate Cycle
 Csab Pathway
 Cyanonoamino Acid Metabo.
 Cysteine Metabolism
 D-Alanine Metabolism
 D-Arginine/D-Ornithine Met.
 DDT Degradation
 D-Gln & D-Glu Metabolism
 D-Lysine
 Entner-Doudroff Pathway
 Erythromycin Biosynthesis
 Ethylbenzene Degradation
 Fatty Acid Biosyn. (Path 1)
 Fatty Acid Biosyn. (Path 2)
 Fatty Acid Biosynthesis
 Fatty Acid Metabolism
 Flavonoid, Stilbene/Lignin Bio.
 Folate Biosynthesis

Pathways Kit B

Fructose/Mannose Metabolism
 Galactose Metabolism
 Gluconeogenesis
 Glucuronate Interconversion
 Glutamate Metabolism
 Glutathione Metabolism
 Glycerolipid Metabolism
 Glycine and Serine Metabolism
 Glycine, Serine/Threonine Met.
 Glycine, Threonine Metabolism
 Glycolysis
 Glycolysis(Dark)/Gluco.(Light)
 Glycolysis/Gluconeogenesis
 Glycoprotein Degradation
 Glycoprotein Metabolism
 Glycoprotein Synthesis
 Glycosaminoglycan Degradation
 Glycosylphosph.(GPI)-Anch. Bio.
 Glyoxylate/Dicarboxylate Meta.
 Glyoxylate Metabolism
 Histidine Metabolism
 Homo-Cis-Aconitate
 Homo-Isocitrate
 Homocitrate
 In Chloroplast
 In Mitochondria
 Inositol Phosphate Metabolism
 L-2-Amino-6-Oxopimelate
 L-2-Amino adipate
 L-2-Amino adipate 6-Semialde.
 L-4-Aspartylphosphate
 L-Aspartate
 L-Aspartate 4-Semialdehyde
 Leucine Biosynthesis
 L-Homoserine
 Lipopolisaccharide Biosynthesis
 L-Lysine
 L-Lys-tRNA(Lys)
 L-Saccharopine
 Lysine Biosynthesis
 Lysine Degradation
 Mesaconate Pathway
 Meso-2,6-Diaminopimelate
 Methane Metabolism
 Methanogenesis
 Methionine Metabolism
 N6-Acetyl-LL-2,6-Diaminopim.
 N-Acetyl-L-2-Amino-6-Oxopi.
 Nicotinate/Nicotinamide Meta.
 Nitrobenzene Degradation
 Nitrogen Metabolism
 N-Succinyl-2-Amino-6-Oxopi.
 N-Succinyl-L-2,6-Diaminopime.
 Nucleotide Sugars Metabolism
 One Carbon Pool by Folate
 Oxaloglutarate
 Oxidative Phosphorylation
 Pantothenate/ CoA Biosynthesis
 Penicillins/ Cephalosporins Bio.
 Pentose/Glucuronate Interconv.

Pathways Kit C*

Pentose Interconversion
 Pentose Phosphate Cycle
 Peptideglycan Metabolism
 Phenylalanine Biosynthesis
 Phenylalanine Metabolism
 Phenyl-, Tryros./Tryptophan Bio.
 Phospholipid Degradation
 Polate Biosynthesis
 Porphyrine Biosynthesis
 Proline Metabolism
 Propanoate Metabolism
 Pterine Biosynthesis
 Purine Metabolism
 Pyrimidine Metabolism
 Pyruvate Metabolism
 Reduced Pentose Phosphate Cycle
 Reductive Carboxylate Cycle
 Retinol Metabolism
 Riboflavin Metabolism
 Selenoamino Acid Metabolism
 Serine Metabolism
 Sphingoglycolipid Metabolism
 Sphingophospholipid Biosynthesis
 Starch And Sucrose Metabolism
 Steroid Hormone Metabolism
 Sterol Biosynthesis
 Streptomycin Biosynthesis
 Styrene Degradation
 Sulfur Metabolism
 Synth./Degrad.Of Ketone Bodies
 Taurine/ Hypotaurine Meta.
 Terpenoid Biosynthesis
 Thiamine Metabolism
 Toluene Degradation
 Tryptophan Metabolism
 Tyrosine Biosynthesis
 Tyrosine Metabolism
 UDP-N-Ace.-L-Ala.-D-Glu.-Me.-2.
 Urea Cycle
 Urea Cycle/Meta.of Amino Groups
 Valine, Leucine/Isoleucine Biosyn.
 Valine, Leucine/Isoleucine Degrad.
 Valine,Leucine/Isoleucine Metabo.
 Vitamine B6 metabolism
 Xylene Degradation
 Y-Glutamyl Cycle

Metabolic Kit Catalog

Alanine And Aspartate Metabolism Kit A

2-Oxoglutarate
2-Oxosuccinamate
Acetyl-CoA
Adenylo-Succinate
B-Alaine
Carnosine
Citrate
D-Alanine
D-Aspartate
Fumarate
L-Alaine
L-Alanyl-tRNA (Ala)
L-Arginino-Succinate
L-Asparagine
L-AsparaginyI-tRNA(Asn)
L-Aspartate
L-Aspartyl-tRNA(Asn)
L-Aspartyl-tRNA(Asp)
Malate
Malonate Semialdehyde
N-Acetyl-L-Aspartate
N-Carbamoyl-L-aspartate
O-Acetylcarnitine
Oxaloacetate
Protein
Pyruvate
Succinate
1.2.1.18 Malonate-Semialdehyde Dehydrogenase (Acetylating)
1.4.3.1 D-Aspartate Oxidase
1.4.3.2 L-Amino-Acid Oxidase
1.4.3.15 D-glutamate (D-Aspartate)Oxidase
1.4.3.16 L-Aspartate Oxidase
2.1.3.2 Aspartate Carbamoyltransferase
2.3.1.7 Carnitine O-Acetyltransferase
2.6.1.1 Aspartate Transaminase
2.6.1.2 Alanine Transaminase
2.6.1.12 Alanine--Oxo-Acid Transaminase
2.6.1.14 Asparagine--Oxo-Acid Transaminase
2.6.1.18 Beta-Alanine--Pyruvate Transaminase
2.6.1.19 4-Aminobutyrate Transaminase
2.6.1.44 Alanine--Glyoxylate Transaminase
3.4.13.3 X-His Dipeptidase
3.5.1.1 Asparaginase
3.5.1.3 Omega-Amidase
3.5.1.7 Ureidosuccinase
3.5.1.15 Aspartoacylase
3.5.1.38 Glutamin-(Asparagin-)ase
4.1.1.11 Aspartate 1-Decarboxylase
4.1.1.12 Aspartate 4-Decarboxylase
4.1.1.15 Glutamate Decarboxylase
4.3.1.1 Aspartate Ammonia-Lyase
4.3.2.1 Argininosuccinate Lyase
4.3.2.2 Adenylsuccinate Lyase
5.1.1.1 Alanine Racemase
5.1.1.13 Aspartate Racemase
6.1.1.7 Alanine--tRNA Ligase
6.1.1.12 Aspartate--tRNA Ligase
6.1.1.22 Asparagine--tRNA Ligase
6.3.1.1 Aspartate--Ammonia Ligase
6.3.4.4 Adenylosuccinate Synthase

Alanine And Aspartate Metabolism Kit B

6.3.4.5 Argininosuccinate Synthase
6.3.5 Carbon--Nitrogen Ligases....
6.3.5.4 Asparagin Synthase(Glutamine-Hydrolysing)
6.4.1.1 Pyruvate Carboxylase

Metabolic Kit Catalog

Alkaloid Biosynthesis I Kit A

(R)-N-Methylcoclaurine
 (R)-Norreticuline
 (R)-Reticuline
 (S)-3'-Hydroxycoclaurine
 (S)-3'-Hydroxy-N-Methylcoclaurine
 (S)-Canadine
 (S)-Cheilanthifoline
 (S)-Cis-N-Methyl-Stylopine
 (S)-Coclaurine
 (S)-N-Methylcoclaurine
 (S)-Norcoclaurine
 (S)-Norlaudanoline
 (S)-Norreticuline
 (S)-Reticuline
 (S)-Scoulerine
 (S)-Stylopine
 (S)-Tetrahydro-Columbamine
 1,2-Dehydro-Reticuline
 10-Hydroxydihydrosanguinarine
 12-Hydroxychelirubine
 2'-Norberbamunine
 3,4-Dihydroxy Phenylacetaldehyde
 4-Hydroxyphenylacetaldehyde
 4-Hydroxyphenylpyruvate
 6-Hydroxyprotopine
 6-O-Methylnorlaudanoline
 Aromorine
 Berbamunine
 Berberine
 Chelirubine
 Codeine
 Codeinone
 Columbamine
 Dihydrochelirubine
 Dihydromacarpine
 Dihydrosanguinarine
 Dopamine
 Glattaguaumerine
 Macarpine
 Morphine
 Morphinone
 Neopinone
 Nororientaline
 O Bamegine
 Oripavine
 Palmatine
 Protopine
 Salutaridine
 Salutaridinol
 Salutaridinol Acetate
 Sanguinarine
 Tetrahydrppalmatine
 Thebaine
 Tyramine
 Tyrosine
 1.1.1.218 Morphine 6-Dehydrogenase
 1.1.1.247 Codeinone Reductase(NADPH)
 1.1.1.248 Salutaridine Reductase (NADPH)
 1.1.3.26 Columamine Oxidase
 1.1.3.32 (S)-Stylopine Synthase

Alkaloid Biosynthesis I Kit B

1.1.3.33 (S)-Cheilanthifoline Synthase
 1.1.3.34 Berbamunine Synthase
 1.1.3.35 Salutaridine Synthase
 1.1.3.36 (S)-Canadine Synthase
 1.3.3.8 Tetrahydroberberine Oxidase
 1.4.3.2 L-Amino-Acid Oxidase
 1.5.1.27 1,2-Dehydroreticulinium Reductase (NADPH)
 1.5.3.9 Reticuline Oxidase
 1.5.3.12 Dihydrobenzophenanthridine Oxidase
 1.14.13.56 Dihydrosanguinarine 10-Monooxygenase
 1.14.13.57 Dihydrochelirubine 12-Monooxygenase
 1.14.18.1 Monophenol Monooxygenase
 2.1.1.86 Tetrahydromethanopterin S-Methyltransferase
 2.1.1.89 Tetrahydrocolumbamine 2-O-Methyltransferase
 2.1.1.115 (R,S)-Tetrahydrobenzylisoquinoline N-Methyltransferase
 2.1.1.116 3'-Hydroxy-N-Methyl-(S)-Coclaurine 4'-O-Methyltrans.
 2.1.1.117 (S)-Scoulerine 9-O-Methyltransferase
 2.1.1.118 Columbamine O-Methyltransferase
 2.1.1.119 10-Dihydroxydihydrosanguinarine 10-O-Methyltrans.
 2.1.1.120 12-Hydroxydihydrochelirubine 12-O-Methyltransferase
 2.1.1.121 6-O-Methylnorlaudanoline 5'-O-Methyltransferase
 2.1.1.128 (R,S)-Norcoclaurine 6-O-Methyltransferase
 2.3.1.150 Salutaridinol 7-O-Acetyltransferase
 2.6.1.1 Aspartate Transaminase
 2.6.1.5 Tyrosine Transaminase
 2.6.1.57 Aromatic-Amino-Acid Transaminase
 4.1.1 Carboxy-Lyases
 4.1.1.25 Tyrosine Decarboxylase
 4.1.1.28 Aromatic-L-Amino-Acid Decarboxylase
 4.2.1.78 (S)-Norlaudanoline Synthase

Alkaloid Biosynthesis II Kit

(6S)-Hydroxy-hyoscyamine
 1-Methyl-Pyrrolinium
 Anabasine
 Anapheline
 Cadaverine
 Cocaine
 Hygrine
 L-Aspartate
 L-Hyoscyamine
 L-Isoleucine
 L-Lysine
 L-Ornithine
 L-Phenylalanine
 L-Pipecolate
 Lupinate
 Nicotinate
 Nicotine
 N-Methylpelletierine
 N-Methyl-Putrescine
 Pelletierine
 Piperidine
 Putrescine
 Quinolinate
 Retronecine
 Scopolamine
 Senecionine
 Slaframine
 Trans-Cinnamate
 Tropate
 Tropine
 Tropinone
 1.1.1.206 Tropine Dehydrogenase
 1.1.1.236 Tropinone Reductase
 1.4.3.6 Amine Oxidase(Copper-Containing)
 1.14.11.11 Hyoscyamine (6S)-Dioxygenase
 1.14.11.14 6Beta-Hydroxyhyoscyamine Epoxidase
 2.1.1.53 Putrescine N-Methyltransferase
 4.1.1.17 Ornithine Decarboxylase
 4.1.1.18 Lysine Decarboxylase
 4.3.1.5 Phenylalanine Ammonia-Lyase

Metabolic Kit Catalog

Aminophosphonate Metabolism Kit

1-Hydroxy-2-Amino-Ethylphosphonate
 2-Aminoethyl-Phosphocholate
 2-Dimethylamino-Ethylphosphonate
 2-Hydroxy-Ethylamine
 2-Hydroxyethyl-Phosphonate
 2-Hydroxypropyl-Phosphonate
 2-Methylamino-Ethylphosphonate
 2-Trimethylamino-Ethylphosphonate
 3-Phosphono Pyruvate
 Acetaldehyde
 Acetate
 Bialaphos
 Ceramide Ciliatine
 Ciliatine
 CMP-2-Trimethyl-Aminoethyl-Phosphonate
 CMPciliatine
 Diacylglyceryl-2-Aminoethyl-Phosphonate
 Diacylglyceryl-2-Trimethyl-Aminoethyl-Phosphonate
 Hydroxymethyl-Phosphonate
 Lipophosphoglycan
 Phosphoenol-Pyruvate
 Phosphono-Acetate
 Phosphono-Acetaldehyde
 Phosphonoalanine
 Phosphono-Formate
 Phosphonomycin
 1.1.3 With Oxygen As Acceptor
 1.1.99 With Other Acceptors
 2.1.1 Methyltransferases
 2.6.1 Transaminases
 2.6.1.37 (2-Aminoethyl)Phosphonate--Pyruvate Transaminase
 2.7.7.14 Ethanolamine-Phosphate Cytidylyltransferase
 2.7.7.15 Choline-Phosphate Cytidylyltransferase
 2.7.8 Transferases For Other Substituted Phosphate Groups
 2.7.8.1 Ethanolaminephosphotransferase
 2.7.8.2 Diacylglycerol Cholinephosphotransferase
 3.11.1.1 Phosphonacetaldehyde Hydrolase
 3.11.1.2 Phosphonoacetate hydrolase
 4.1.1 Carboxy-Lyases
 4.99.1 Other Lyases
 5.4.2.9 Phosphoenolpyruvate Mutase

Aminosugars Metabolism Kit A

Chitin
 Chitobiose
 Chitosan
 CMP-N-Acetylneuraminat
 CMP-N-Glycolylneuraminat
 Colominate
 D-Fructose-6P
 D-Glucosaminide
 D-Glucosamine
 D-Glucosamine(Extrace Ilular)
 D-Glucosamine-1P
 D-Glucosamine-6P
 Glucosaminat
 Glycolipid
 Glycoprotein
 Mucopolysaccharide
 N-Acetyl-D-Glucosamine
 N-Acetyl-D-Glucosamine(Extrace Ilular)
 N-Acetyl-D-Glucosamine-1P
 N-Acetyl-D-Glucosamine-6P
 N-Acetyl-D-Mannosamine
 N-Acetyl-D-Mannosamine-6P
 N-Acetyl-Neuraminat
 N-Acetyl-Neuraminat-9P
 N-Glycolylneuraminat
 N-Palmitoyl-Glycoprotein
 UDP-N-Acetyl-3-O-(1-Carboxyvinyl)-D-Glucosamine
 UDP-N-Acetyl-D-Galactosamine
 UDP-N-Acetyl-D-Glucosamine
 UDP-N-Acetyl-D-Mannosamine
 UDP-N-Acetyl-D-Mannosaminouronate
 UDP-N-Acetyl-Glucosaminouronate
 UDP-N-Acetyl-Muramate
 1.1.1.136 UDP-N-Acetylglucosamine 6-Dehydrogenase
 1.1.1.158 UDP-N-Acetylmuramate Dehydrogenase
 1.1.1.233 N-Acylmannosamine 1-Dehydrogenase
 1.6.2.2 Cytochrome-B5 Reductase
 1.14.13.45 CMP-N-Acetylneuraminat Monooxygenase
 1.14.99.18 N-Acetylneuraminat Monooxygenase
 2.3.1 Acyltransferases
 2.3.1.3 Glucosamine N-Acetyltransferase
 2.3.1.4 Glucosamine-Phosphate N-Acetyltransferase
 2.3.1.96 Glycoprotein N-Palmitoyltransferase
 2.4.1.6 Chitin Synthase
 2.5.1.7 UDP-N-Acetylglucosamine 1-Carboxyvinyltrans.
 2.6.1.16 Glutamine--Fructose-6-Phosphate Trans(Iso).
 2.7.1.1 Hexokinase
 2.7.1.8 Glucosamine Kinase
 2.7.1.59 N-Acetylglucosamine Kinase
 2.7.1.60 N-Acylmannosamine Kinase
 2.7.1.69 Protein-N(Pai)-Phosphohistidine--Sugar Phos.
 2.7.7.23 UDP-N-Acetylglucosamine Pyrophosphorylase
 2.7.7.43 N-Acyneuraminat Cytidylyltransferase
 3.1.3 Phosphoric Monoester Hydrolases
 3.1.3.29 N-Acylneuraminat-9-Phosphatase
 3.1.4 Phosphoric Diester Hydrolases
 3.2.1 Hydrolysing O-Glycosyl Compounds
 3.2.1.14 Chitinase
 3.2.1.50 Alpha-N-Acetylglucosaminidase
 3.2.1.52 Beta-N-Acetylhexosaminidase

Metabolic Kit Catalog

Aminosugars Metabolism Kit B

3.2.1.132 Chitosanase
 3.5.1.25 N-Acetylglucosamine-6-Phosphate Deacetylase
 3.5.1.33 N-Acetylglucosamine Deacetylase
 3.5.1.41 Chitin Deacetylase
 4.1.3.3 N-Acetylneuraminate Lyase
 4.1.3.19 N-Acetylneuraminate Synthase
 4.1.3.20 N-Acylneuraminate-9-Phosphate Synthase
 5.1.3.7 UDP-N-Acetylglucosamine 4-Epimerase
 5.1.3.8 N-Acylglucosamine 2-Epimerase
 5.1.3.9 N-Acylglucosamine-6-Phosphate 2-Epimerase
 5.1.3.14 UDP-N-Acetylglucosamine 2-Epimerase
 5.3.1.10 Glucosamine-6-Phosphate Isomerase
 5.4.2.2 Phosphoglucomutase
 5.4.2.3 Phosphocetylglucosamine Mutase

Androgen And Estrogen Metabolism Kit A

11B-Hydroxy.-4-Ene-3,17-Dione
 16A-Hydroxy.-4-Ene-3,17-Dione
 16A-Hydroxyde.-Epiandrosterone
 16A-Hydroxyestrone
 16-Glucuronide
 17A-Hydroxy-Pregeneolone
 19-Hydroxyan.-4-Ene-3,17-Dione
 19-Hydroxy-Testosterone
 19-Oxo-Andro.-4-Ene-3,17-Dione
 19-Oxotestosterone
 2-Hydroxy-Estradiol-17B
 2-Hydroxyestrone
 2-Methoxy-Estradiol17B
 2-Methoxyestrone
 3B,17B-Dihydroxyandrost-5-Ene
 3-Glucuronide
 3-Ox-13,17-Se.-4-En-17,13A-La.
 5A-Androstane-3,17-Dione
 5A-Dihydro-Testosterone
 5B-Androstane-3,17-Dione
 5B-Dihydro-Testosterone
 6B-Hydroxy-Estradiol17B
 7A-Hydroxy-Androstenedione
 7A-Hydroxy-Testosterone
 Adrenosterone
 Androst-4-Ene-3,17-Dione
 Androsterone
 Dehydro-Epiandrosterone
 Dehydroepian.-Sterone Sulfate
 Estradiol-17A
 Estradiol-17B
 Estriol
 Estrone
 Estrone3-Sulfate
 Etiocholan-3A-ol-17-One
 Glucuronide
 Sulfate
 Testosterone
 1.1.1.50 3Alpha-Hydroxysteroid Dehydrogenase(B-Spec.)
 1.1.1.51 3(or 17)Beta-Hydroxysteroid Dehydrogenase
 1.1.1.62 Estradiol 17Beta-Dehydrogenase
 1.1.1.63 Testosterone 17Beta-Dehydrogenase
 1.1.1.64 Testosterone 17Beta-Dedhydrogenase(NADP+)
 1.1.1.145 3Beta-Hydroxy-Delta5-Steroid Dehydrogenase
 1.1.1.146 11Beta-Hydroxysteroid Dehydrogenase
 1.1.1.148 Estradiol 17Alpha-Dehydrogenase
 1.1.1.152 3Alpha-Hydroxy-5Beta-Androstane-17-One 3Alpha-Dehy.
 1.1.1.239 3Alpha(17Beta)-Hydroxysteroid Dehydrogenase(NAD+)
 1.3.99.5 3-Oxo-5Alpha-Steroid 4-Dehydrogenase
 1.3.99.6 3-Oxo-5Beta-Steroid 4-Dehydrogenase
 1.14.13 With NADH or NADPH as One Donor....
 1.14.15.4 Steroid 11 Beta-Monooxygenase
 1.14.99 Miscellaneous
 1.14.99.11 Estradiol 6Beta-Monooxygenase
 1.14.99.12 4-Androstene-3,17-Dione Monooxygenase
 2.1.1 Methyltransferases
 2.4.1.17 Glucuronosyltransferase
 2.8.2.15 Steroid Sulfotransferase
 2.8.2.22 Arylsulfate Sulfotransferase
 2.8.2.4 Estrone Sulfotransferase

Metabolic Kit Catalog

Androgen And Estrogen Metabolism Kit B

3.1.6.1 Arylsulfatase
3.1.6.2 Steryl-Sulfatase
4.1.2.30 17Alpha-Hydroxyprogesterone Aldolase
5.3.3.1 Steroid Delta-Isomerase

Arginine And Proline Metabolism Kit A

1,3-Diamino-Propane
1-Pyrroline 2-Carboxylate
1-Pyrroline-4-Hydroxy-2-Carboxylate
2,5-Dioxo-Pentanoate
2-Oxo-4-Hydroxy-5-Aminovalerate
2-Oxo-5-Aminovalerate
2-Oxo-Arginine
4-Amino-Butanal
4-Amino-Butanoate
4-Guanidine-Butanamide
4-Guanidino-Butanal
4-Guanidino-Butanoate
4-Oxoproline
5-Amino-Pentanoate
5-Methylthio-Adenosine
Adenine
Agmatine
Arginine
Aspartate
Carbamoyl-P
Cis-4-Hydroxy-D-Proline
Citrulline
Co2
Creatine
Creatine-P
Creatinine
D-4-Hydroxy-2-Oxoglutanate
D-Nopaline
D-Octopine
D-Proline
Fumarate
Glutamate
Glyoxylate
Guanidino-Acetate
Guanidino-Acetate-P
L-1-Pyrroline 3-Hydroxy-5-Carboxylate
L-1-Pyrroline 5-Carboxylate
L-4-Hydroxy-Glutamate Semialdehyd
L-Arginine-P
L-Arginino-Succinate
L-Arginyl-tRNA(Arg)
L-Erythro-4-Hydroxy-Glutamate
L-Glutamate 5-Semialdehyde
L-Homocarnosine
Linatine
L-Proline
L-Prolyl-tRNA(Pro)
N-(Omega)-Hydroxyarginine
N2-Succinyl-Glutamate
N2-Succinyl-L-Arginine
N2-Succinyl-L-Glutamate 5-Semialdehyde
N2-Succinyl-L-Ornithine
N4-Acetyl-Aminobutanal
N4-Acetyl-amino-Butanoate
N-Acetyl-Putrescine
N-Carbamoyl-Putrescine
NH3
Nitric Oxide
Ornithine
Peptide

Metabolic Kit Catalog

Arginine And Proline Metabolism Kit B

Protein
 Putrescine
 Pyrrole-2-Carboxylate
 Pyruvate
 S-Adenosyl-L-Methionine
 S-Adenosyl-Methioninamine
 Spermidine
 Spermine
 Trans-4-Hydroxy-L-Proline
 Urea
 1.1.1.104 4-Oxoproline Reductase
 1.2.1.3 Aldehyde Dehydrogenase(NAD+)
 1.2.1.19 Aminobutyraldehyde Dehydrogenase
 1.2.1.54 Gamma-Guanidinobutyraldehyde Dehydrogenase
 1.4.1.3 Glutamate Dehydrogenase(NAD(P)+)
 1.4.1.12 2,4-Diaminopentanoate Dehydrogenase
 1.4.3.3 D-Amino-Acid Oxidase
 1.4.4.1 D-Proline Reductase(Dithiol)
 1.5.1.1 Pyrroline-2-Carboxylate Reductase
 1.5.1.2 Pyrroline-5-Carboxylate Reductase
 1.5.1.11 D-Octopine Dehydrogenase
 1.5.1.12 1-Pyrroline-5-Carboxylate Dehydrogenase
 1.5.1.19 D-Nopaline Dehydrogenase
 1.5.99.6 Spermidine Dehydrogenase
 1.5.99.8 Proline Dehydrogenase
 1.13.12.1 Arginine 2-Monooxygenase
 1.14.11.2 Procollagen-Proline Dioxygenase
 1.14.13.39 Nitric-Oxide Synthase
 2.1.1.2 Guanidinoacetate N-Methyltransferase
 2.1.3.3 Ornithine Carbamoyltransferase
 2.1.4.1 Glycine Amidinotransferase
 2.3.1.57 Diamine N-Acetyltransferase
 2.3.1.109 Arginine N-Succinyltransferase
 2.5.1.16 Spermidine Synthase
 2.5.1.22 Spermine Synthase
 2.5.1.23 Syn-Norspermidine Synthase
 2.6.1.1 Aspartate Transaminase
 2.6.1.13 Ornithine--Oxo-Acid Transaminase
 2.6.1.21 D-Alanine Transaminase
 2.6.1.23 4-Hydroxyglutamate Transaminase
 2.6.1.29 Diamine Transaminase
 2.7.2.2 Carbamate Kinase
 2.7.3.1 Guanidoacetate Kinase
 2.7.3.2 Creatine Kinase
 2.7.3.3 Arginine Kinase
 3.2.2.16 Methylthioadenosine Nucleosidase
 3.4.11.5 Prolyl Aminopeptidase
 3.4.13.3 X-His Dipeptidase
 3.5.1 In Linear Amides
 3.5.1.4 Amidase
 3.5.1.53 N-Carbamoylputrescine Amidase
 3.5.1.62 Acetylputrescine Deacetylase
 3.5.1.63 4-Acetamidobutyrate Decetylase
 3.5.2.10 Creatininase
 3.5.3 In Linear Amidines
 3.5.3.1 Arginase
 3.5.3.6 Arginine Deiminase
 3.5.3.7 Guanidinobutyrase
 3.5.3.11 Agmatinase
 3.5.3.12 Agmatine Deiminase

Arginine And Proline Metabolism Kit C

3.5.4.22 1-Pyrroline-4-Hydroxy-2-Carboxylate Deaminase
 4.1.1 Carboxy-Lyases
 4.1.1.13 Deleted Entry
 4.1.1.17 Ornithine Decarboxylase
 4.1.1.19 Arginine Decarboxylase
 4.1.1.50 Adenosylmethionine Decarboxylase
 4.1.2.14 2-Dehydro-3-Deoxyphosphogluconate Aldolase
 4.1.3.16 4-Hydroxy-2-Oxoglutarate Aldolase
 4.3.1.12 Ornithine Cyclodeaminase
 4.3.2.1 Argininosuccinate Lyase
 5.1.1.4 Proline Racemase
 5.1.1.8 4-Hydroxyproline Epimerase
 6.1.1.15 Proline--tRNA Ligase
 6.1.1.19 Arginine--tRNA Ligase
 6.3.2.11 Carnosine Synthase
 6.3.4.5 Argininosuccinate Synthase
 6.3.4.16 Carbamoyl-Phosphate Synthase(Ammonia)

Metabolic Kit Catalog

Biphenyl Degradation Kit

2,3-Dihydroxy-4'-Chlorobiphenyl
2,3-Dihydro-2,3-Dihydroxybiphenyl
2,3-Dihydroxy -P-Cumate
2,3-Dihydroxybiphenyl
2-Hydroxy-3-Carboxy-6-Oxo-7-Methylocta-2,4-Dienoate
2-Hydroxy-6-Oxo-6-(4'-Chlorophenyl)-Hexa-2,4-Dienoate
2-Hydroxy-6-Oxo-6-Phenylhexa-2,4-Dienoate
2-Hydroxy-6-Oxo-7-Methylocta-2,4-Dienoate
4-Chlorobenzoate
4-Chlorobiphenyl
4-Hydroxy-2-Oxovalerate
Acetaldehyde
Biphenyl
Cis-2,3-Dihydro-2,3-Dihydroxy-4'-Chlorobiphenyl
Cis-2,3-Dihydroxy-2,3-Dihydro-P-Cumate
Cis-2-Hydroxypenta-2,4-Dienoate
Isobutyrate
P-Cumate
P-Cumic Alcohol
P-Cumic Aldehyde
P-Cymene
Pyruvate
1.1.1.90 Aryl-Alcohol Dehydrogenase
1.2.1.29 Aryl-Aldehyde Dehydrogenase
1.13.11.39 Biphenyl-2,3-Diol 1,2-Dioxygenase
3.7.1.8 2,6-Dioxo-6-Phenylhexa-3-Enoate Hydrolase
4.1.2 Aldehyde-Lyases
4.2.1.80 2-Oxopent-4-Enoate Hydratase

Ascorbate And Aldarate Metabolism

2,3-Dioxo-L-Gulonate
2,5-Dioxopentanoate
2-Dehydro-3-Deoxy-D-Arabinonate
2-Dehydro-3-Deoxy-D-Glucarate
2-Dehydro-3-Deoxy-L-Arabinonate
2-Oxoglutarate
3-Dehydro-L-Threonate
(4S)-5-Hydroxy-2,4-Dioxopentanoate
5-Dehydro-4-Deoxy-D-Glucarate
D-Galactarate
D-Galacturonate
D-Galacturono-Lactone
D-Glucarate
D-Glucuronate
D-Glucurono-Lactone
L-Arabino-1,4-Lactone
L-Arabino-1,5-Lactone
L-Arabinonate
L-Arabinose
L-Ascorbate
L-Dehydro-Ascorbate
L-Galactono-1,4-Lactone
L-Gulonate
L-Gulono-1,4-Lactone
L-Lyxonate
L-Threonate
L-Xylo-Hexulonolactone
L-Xylonate
Monodehydro-Ascorbate
Pyruvate
Tartronate Semialdehyde
1.1.1 Oxidoreductases With NAD⁺ or NADP⁺ as Acceptor
1.1.1.122 D-threo-aldose 1-Dehydrogenase
1.1.1.129 L-Threonate 3-Dehydrogenase
1.1.1.19 Glucuronate Reductase
1.1.1.20 Glucuronolactone Reductase
1.1.1.46 L-Arabinose 1-Dehydrogenase
1.1.3.24 L-Galactonolactone Oxidase
1.1.3.8 L-Gulonolactone Oxidase
1.10.3.3 L-Ascorbate Oxidase
1.11.1.11 L-Ascorbate Peroxidase
1.13.11.13 Ascorbate 2,3-Dioxygenase
1.14 Oxidoreductases Acting on Paired Donors ...
1.2.1.26 2,5-Dioxovalerate Dehydrogenase
1.2.1.3 Aldehyde Dehydrogenase (NAD⁺)
1.3.2.3 Galactonolactone Dehydrogenase
1.6.5.4 Monodehydroascorbate Reductase (NADH)
1.8.5.1 Glutathione Dehydrogenase(Ascorbate)
3.1.1.15 L-Arabinonolactonase
3.1.1.17 Gluconolactonase
3.1.1.19 Uronolactonase
3.1.1.25 1,4-Lactonase
3.7.1 Hydrolases In Ketonic Substances
4.1.1 Carboxy-Lyases
4.1.2.20 2-Dehydro-3-Deoxyglucarate Aldolase
4.2.1.25 L-Arabinonate Dehydratase
4.2.1.40 Glucarate Dehydratase
4.2.1.41 5-Dehydro-4-Deoxyglucarate Dehydratase
4.2.1.42 Galactarate Dehydratase
4.2.1.43 2-Dehydro-3-Deoxy-L-Arabinonate Dehydratase

Metabolic Kit Catalog

Beta-Alanine Metabolism Kit A

Pantothenate
1,3-Diaminopropane
3-Hydroxy-Propanoate
3-Hydroxy-Propanoyl-CoA
4-Aminobutanal
4-Aminobutanoate
5,6-Dihydrouracil
Acetyl-CoA
Acetylene-Monocarboxylate
Acrylyl-CoA
Anserine
B-Alanine
B-Alanyl Arginine
B-Alanyl Lysine
B-Alanyl-CoA
B-Aminopropionaldehyde
B-Amino-Propionitrile
B-Nitropropanoate
Carnosine
Histidine
L-Aspartate
Malonate
Malonate Semialdehyde
Malonyl-CoA
N-Acetyl-B-Alanine
N-Carbamoyl-B-Alanine
Propionyl-CoA
Quinolate
Spermidine
Spermine
Uracil
1.1.1.59 3-Hydroxypropionate Dehydrogenase
1.2.1.3 Aldehyde Dehydrogenase (NAD+)
1.2.1.15 Malonate-Semialdehyde Dehydrogenase
1.2.1.18 Malonate-Semialdehyde Dehydrogenase(Acetylating)
1.2.1.19 Aminobutyraldehyde Dehydrogenase
1.3.1.1 Dihydrouracil Dehydrogenase (NAD+)
1.3.1.2 Dihydropyrimidine Dehydrogenase (NADP+)
1.3.99.3 Acyl-CoA Dehydrogenase
1.4.3.6 Amine Oxidase (Copper-Containing)
1.5.99.6 Spermidine Dehydrogenase
2.5.1.16 Spermidine Synthase
2.5.1.22 Spermine Synthase
2.6.1.18 Beta-Alanine--Pyruvate Transaminase
2.6.1.19 4-Aminobutyrate Transaminase
2.6.1.55 Taurine Transaminase
2.8.3.3 Malonate CoA-Transferase
3.1.2.4 3-Hydroxyisobutyryl-CoA Hydrolase
3.4.13.3 X-His Dipeptidase
3.4.13.4 X-Arg Dipeptidase
3.4.13.5 X-Methyl-His Dipeptidase
3.4.13.20 Beta-Ala-His-Dipeptidase
3.5.1.6 Beta-Ureidopropionase
3.5.1.21 N-Acetyl-Beta-Alanine Deacetylase
3.5.2.2 Dihydropyrimidinase
4.1.1.9 Malonyl-CoA Decarboxylase
4.1.1.11 Aspartate 1-Decarboxylase
4.1.1.15 Glutamate Decarboxylase
4.2.1.17 Enoyl-coA Hydratase
4.2.1.27 Malonate-Semialdehyde Dehydratase

Beta-Alanine Metabolism Kit B

4.3.1.6 Beta-Alanyl-CoA Ammonia-Lyase
6.3.2.1 Pantoate--Beta-Alanine Ligase

Metabolic Kit Catalog

Bile Acid Biosynthesis Kit A

3a,,7a,12a-Trihydroxy-5B-Cholestanoate
3a,7a,12a,24-Tetrahydroxy-5B-Cholestanoyl-CoA
3a,7a,12a,26-Tetrahydroxy-5B-Cholestane
3a,7a,12a-Trihydroxy-5B-24-Oxocholestanoyl-CoA
3a,7a,12a-Trihydroxy-5B-Cholest-24-Enoyl-CoA
3a,7a,12a-Trihydroxy-5B-Cholestan-26-Al
3a,7a,12a-Trihydroxy-5B-Cholestane
3a,7a,12a-Trihydroxy-5B-Cholestanoyl-CoA
3a,7a,24-Trihydroxy-5B-Cholestanoyl-CoA
3a,7a,26-Trihydroxy-5B-Cholestane
3a,7a-Dihydroxy-5B-24-Oxocholestanoyl-CoA
3a,7a-Dihydroxy-5B-Cholest 24-Enoyl-CoA
3a,7a-Dihydroxy-5B-Cholestan-26-Al
3a,7a-Dihydroxy-5B-Cholestane
3a,7a-Dihydroxy-5B-Cholestanoate
3a,7a-Dihydroxy-5B-Cholestanoyl-CoA
5B-Cyprinol-Sulfate
7A,12a-Dihydroxy-5a-Cholestan-3-One
7a,12a-Dihydroxy-5B-Cholestan-3-One
7A,12A-Dihydroxy-Cholest-4-En-3-One
7a-Hydroxy-5B-Cholestan-3-One
7a-Hydroxycholest-4-En-3-On
7A-Hydroxy-Cholesterol
Chanodeoxyglychocholate
Chenodeoxycholate
Chenodeoxy-Choloyl-coA
Chenodeoxy-Glychocholoyl-CoA
Cholate
Cholest-4-En-3-One
Cholesterol
Cholesterolester
Choloyl-CoA
Deoxycholate
Glychoheno-Deoxycholate
Glycine
Glyco-Cholate
Glyco-Deoxycholate
Lithocholate
Taurin
Taurocheno-Deoxycholate
Tauro-Cholate
Tauro-Deoxycholate
1.1.1.1 Alcohol Dehydrogenase
1.1.1.50 3Alpha-Hydroxysteroid Dehydrogenase...
1.1.1.53 3(or 20Beta)-Hydroxysteroid Dehydrogenase
1.1.1.161 Cholestanetetraol 26-Dehydrogenase
1.1.1.181 Cholest-5-Ene-3Beta, 7Alpha-Diol 3Beta-D.
1.1.3.6 Cholesterol Oxidase
1.2.1.3 Aldehyde Dehydrogenase (NAD+)
1.2.1.40 3Alpha, 7Alpha, 12Alpha-trihydroxycholestan
1.3.1.23 Cholestenone 5Beta-Reductase
1.3.99 With Other Acceptors
1.3.99.5 3-Oxo-5Alpha-Steroid 4-Dehydrogenase
1.3.99.6 3-Oco-5Beta-Steroid 4-Dehydrogenase
1.14.13 With NADH or NADPH as One Donor
1.14.13.15 Cholestanetriol 26-Monooxygenase
1.14.13.17 Cholesterol 7Alpha-Monooxygenase
2.3.1.16 Acetyl-CoA C-Acyltransferase
2.3.1.26 Sterol O-Acyltransferase
2.3.1.65 Glycine N-Choloyltransferase

Bile Acid Biosynthesis Kit B

2.3.1.73 Diacylglycerol--Sterol O-Acyltransferase
3.1.1.13 Sterol Esterase
3.5.1.24 Choloylglycine Hydrolase
4.2.1 Hydro-Lyases
6.2.1.7 Cholate--CoA Ligase
6.2.1.28 3Alpha, 7Alpha-Dihydroxy-5Beta-Chol.-CoA Ligase
6.2.1.29 3Alpha,7Alpha, 12Alpha-Trihydroxy....

Metabolic Kit Catalog

Butanoate Metabolism Kit A

(R,R)-Butane-2,3-diol
(S)-2-Acetoin
(S)-3-Hydroxy-Butanoyl-CoA
(s,S)-Butane-2,3-Diol
2-Acetoin
3-(3-Hydroxy-Butanoyloxy)
3-Hydroxy-Butanoate
3-Hydroxy-Butanoyl-CoA
Malate
1-Butanol
2-(a-Hydroxyethyl)-ThPP
2-Acetolactate
2-Hydroxy-Glutarate
2-Hydroxy-Glutaryl-CoA
2-Oxoglutarate
3-Butenoyl-CoA
3-Butyn-1-al
3-Butyn-1-ol
3-Butynoate
3-Hydroxy-3-Methylglutaryl-CoA
4-Aminobutanoate
4-Hydroxy-Butanoate
Acetoacetate
Acetoacetyl-CoA
Butanal
Butanoate
Butanoyl-CoA
Butanoyl-P
Crotonoyl-CoA
Diacetyl
Fumarate
Glutaconyl-CoA
L-Glutamate
Maleate
Poly-B-Hydroxybutyrate
Pyruvate
Succinate
Succinate Semialdehyde
ThPP
1.1.1 With NAD+ or NADP+ as Acceptor
1.1.1.157 3-Hydroxybutyryl-CoA Dehydrogenase
1.1.1.30 3-Hydroxybutyrate Dehydrogenase
1.1.1.35 3-Hydroxyacyl-CoA Dehydrogenase
1.1.1.36 Acetoacetyl-CoA Reductase
1.1.1.4 (R,R)-Butanediol Dehydrogenase
1.1.1.5 Acetoin Dehydrogenase;
1.1.1.61 4-Hydroxybutyrate Dehydrogenase
1.1.1.76 (S,S)-Butanediol Dehydrogenase
1.1.1.83 D-Malate Dehydrogenase(Decarboxylating)
1.1.99.2 2-Hydroxyglutarate Dehydrogenase
1.1.99.8 Alcohol Dehydrogenase (Acceptor)
1.2.1.10 Acetaldehyde Dehydrogenase (Acetylating)
1.2.1.16 Succinate-Semialdehyde Dehydrogenase(NAD(P)+)
1.2.1.24 Succinate-Semialdehyde Dehydrogenase
1.2.1.3 Aldehyde Dehydrogenase (NAD+)
1.2.157 Butanal Dehydrogenase
1.2.4.1 Pyruvate Dehydrogenase (Lipoamide)
1.2.7.1 Pyruvate Synthase
1.2.99.3 Aldehyde Dehydrogenase
1.3.1.44 Trans-2-Enoyl-CoA Reductase (NAD+)

Butanoate Metabolism Kit B

1.3.99.1 Succinate Dehydrogenase
1.3.99.2 Butyryl-CoA Dehydrogenase
2.3.1 Acyltransferases
2.3.1.19 Phosphate Butyryltransferase
2.3.1.54 Formate C-Acetyltransferase
2.3.1.9 Acetyl-CoA C-Acetyltransferase
2.6.1.19 4-Aminobutyrate Transaminase
2.7.2.7 Butyrate Kinase
2.8.3.12 Glutaconate CoA-Transferase
2.8.3.5 3-Oxoacid CoA-Transferase
2.8.3.8 Acetate CoA-Transferase
3.1.1 Carboxylic Ester Hydrolases
3.1.1.22 Hydroxybutyrate-Dimer Hydrolase
3.1.2.11 Acetoacetyl-coA Hydrolase
4.1.1.5 Acetolactate Decarboxylase
4.1.1.70 Glutaconyl-CoA Decarboxylase
4.1.3.18 Acetolactate Synthase
4.1.3.4 Hydroxymethylglutaryl-CoA Lyase
4.1.3.5 Hydroxymethylglutaryl-CoA Synthase
4.2.1 Hydro-Lyases
4.2.1.17 Enoyl-coA Hydratase
4.2.1.31 Maleate Hydratase
4.2.1.55 3-Hydroxybutyryl-CoA Dehydratase
4.2.1.71 Acetylenecarboxylate Hydratase
5.1.2.3 3-Hydroxybutyryl-CoA Epimerase
5.1.2.4 Acetoin Racemase
5.2.1.1 Maleate Isomerase
6.2.1.16 Acetoacetate--CoA Ligase
6.2.1.2 Butyrate--CoA Ligase

Metabolic Kit Catalog

Carbon Fixation Kit

1,3-Bisphospho-Glucerate
Alanine
Aspartate
B-D-Fructose-1,6P2
B-D-Fructose-6P
Co2(Atmosphere)
Co2(Bundle-Sheeth Cell)
Erythrose-4P
Glyceraldehyde-3P
Glycerate-3P
Glycerone-P
H2O
Malate
Oxaloacetate
Oxaloacetate(Dark)
Phosphoenol-Pyruvate
Pyruvate
Pyruvate(Light)
Ribose-5P
Ribulose 1,5-Bisphosphate
Ribulose-5P
Sedoheptulose
Sedoheptulose 1,7-Bisphosphate
Sedoheptulose 1-Phosphate
Sedoheptulose 7-Phosphate
Starch
Xylulose-5P
1.1.1.37 Malate Dehydrogenase
1.1.1.39 Malate Dehydrogenase(Decarboxylating)
1.1.1.40 Malate Dehydrogenase(Oxaloacetate-Decarboxylating)(NADP+)
1.1.1.82 Malate Dehydrogenase(NADP+)
1.2.1.13 Glyceraldehyde-3-Phosphate Dehydrogenase(NADP+)(Phosphorylating)
2.2.1.1 Transketolase
2.6.1.1 Aspartate Transaminase
2.6.1.2 Alanine Transaminase
2.7.1.14 Sedoheptulokinase
2.7.1.19 Phosphoribulokinase
2.7.1.40 Pyruvate Kinase
2.7.2.3 Phosphoglycerate Kinase
2.7.9.1 Pyruvate, Orthophosphate Dikinase
3.1.3.11 Fructose-Bisphosphatase
3.1.3.37 Sedoheptulose-Bisphosphatase
4.1.1.31 Phosphoenolpyruvate Carboxylase
4.1.1.39 Ribulose-Bisphosphate Carboxylase
4.1.1.49 Phosphoenolpyruvate Carboxykinase (ATP)
4.1.2.9 Phosphoketolase
4.1.2.13 Fructose-Bisphosphate Aldolase
5.1.3.1 Ribulose-Phosphate 3-Epimerase
5.3.1.1 Triose-Phosphate Isomerase
5.3.1.6 Ribose-5-Phosphate Epimerase

3-Chloroacrylic Acid Degradation Kit

3-Chloroallyl Aldehyde
Acetyl-CoA
Cis-1,3-Dichloropropene
Cis-3-Chloro-2-Propene-1-Ol
Cis-3-Chloroacrylic Acid
Malonate Semialdehyde
Trans-1,3-Dichloropropene
Trans-3-Chloro-2-Propene-1-Ol
Trans-3-Chloroacrylic Acid
1.2.1.18 Malonate-Semialdehyde Dehydrogenase...
1.2.99 With Other Acceptors
3.8.1 In C-Halide Compounds
3.8.1.5 Haloalkane Dehalogenase
Gamma-Hexachlorocyclohexane Degradation Kit
1,2,4-Benzenetriol
1,2,4-Trichlorobenzene
1,3,4,6-Tetrachloro-1,4-Cyclohexadiene
2,4,5-Trichloro-2,5-Cyclohexadiene-1-Ol
2,5-Dichloro-2,5-Cyclohexadiene-1,4-Diol
2,5-Dichlorohydroquinone
2,5-Dichlorophenol
3-Oxoadipate
4-Nitrocatechol
4-Nitrophenol
4-Nitrophenyl Phosphate
Aminoparathion
Chlorohydroquinone
Cis,Trans-Hydroxy-Muconicsemialdehyde
Diethylphosphoric Acid
Diethylthiophosphoric Acid
Gamma-Hexachloro-Cyclohexane
Gamma-Pentachloro-Cyclohexene
Hydroquinone
Maleylacetate
P-Aminophenol
Paraoxon
Parathion
P-Benzoquinone
Resorcinol
1.3.1.32 Maleylacetate Reductase
1.6.5 With Quinone Or Related Compound Aa Acceptor
1.13.11.37 Hydroxyquinol 1,2-Dioxygenase
1.14 Acting On Paired Donors
1.14.13 With NADH Or NADPH As One Donor....
1.14.13.7 Phenol 2-Monooxygenase
1.14.13.29 4-Nitrophenol 2-Monooxygenase
1.14.14.1 Unspecific Monooxygenase
3.1.3.1 Alkaline Phosphatase
3.1.3.2 Acid Phosphatase
3.1.3.41 4-Nitrophenylphosphatase
3.1.8.1 Aryldialkylphosphatase

Metabolic Kit Catalog

Cyanoamino Acid Metabolism Kit

2-Oxoacid Oxime
 A-Amino-Propionitrile
 A-Amino-Y-Cyanobutanoate
 Alanine
 Aldoxime
 Carboxylate
 Co2
 Cyanide
 Cyanoglycoside
 Cyanohydrin
 Cysteine
 Formamide
 Glutamate
 Glycine
 Homocysteine
 Homocystine
 L-2,4-Diaminobutanoate
 L-3-Cyanoalanine
 L-Amino Acid
 L-Asparagine
 L-Aspartate
 Monocarboxylic Acid Amide
 NH3
 N-Hydroxy Amino Acid
 Nitrile
 Serine
 Y-Amino-Y-Cyanobutanoate
 Y-Glutamyl-B-Aminopropionitrile
 Y-Glutamyl-B-Cyanoalanine
 1.14.13.41 Tyrosine N-Monooxygenase
 2.1.2.1 Glycine Hydroxymethyltransferase
 2.3.2.2 Gamma-Glutamyltransferase
 2.4.1.85 Cyanohydrine Beta-Glucosyltransferase
 3.2.1.21 Beta-Glucosidase
 3.5.1.1 Asparaginase
 3.5.1.4 Amidase
 3.5.5.1 Nitrilase
 3.5.5.4 Cyanoalanine Nitrilase
 3.5.5.5 Arylacetonitrilase
 4.1.2.10 Mandelonitrile Lyase
 4.1.2.11 Hydroxymandelonitrile Lyase
 4.2.1 Hydro-Lyases
 4.2.1.29 Indoleacetaldoxime Dehydratase
 4.2.1.65 3-Cyanoalanine Hydratase
 4.2.1.66 Cyanide Hydratase
 4.2.1.84 Nitrile Hydratase
 4.4.1.9 L-3-Cyanoalanine Synthase
 6.3.1.1 Aspartate--Ammonia Ligase

Citrate Cycle Kit A

(3S)-Citryl-CoA
 (S)-Malate
 2-Oxo-Glutarate
 3-Carboxy-1-Hydrox.-ThPP
 Acetate
 Acetyl-CoA
 Adenosine Diphosphate ADP
 Adenosine Triphosphate ATP
 A-Ketoglutaric Acid
 Arginine/Proline Metabolism
 Ascorbate/Aldarate Meta.
 Aspartate Metabolism
 Butanoate Metabolism
 Carbon Dioxide Co2
 Cis-Aconitate
 Citrate/Citric Acid
 Coenzyme A
 D-Glutamine & D-Glut. Met.
 Dihydrolipoamide
 Fatty Acid Biosynth (Path1)
 Fatty Acid Biosynth (Path2)
 Fatty Acid Metabolism
 Flavin Adenine Dinucl. FAD
 Fumarate/Fumaric Acid
 Glutamate Metabolism
 Glycolysis/Gluconeogenesis
 Glyoxylate/Dicarboxylate Met
 Guanosine Diphosphate GDP
 Guanosine Triphosphate GTP
 Isocitrate/Isocitric Acid
 Lipoamide
 Lysine Biosynthesis
 Lysine Degradation
 Malic Acid
 Nicotin. Aden. Dinucle. NAD
 Oxaloacetate
 Oxalosuccinate
 Oxidative Phosphorylation
 Phenylalanine Metabolism
 Phosphoenol Pyruvate
 Phosphofructokinase
 Propanoate Metabolism
 Pyruvate Metabolism
 Pyruvate/Pyruvic Acid
 Re. Fla. Ade. Din. FADH2
 Re. Nic. Ade.Din. NADH
 S-Succinyl-Dihydrolipoa.
 Succinate/Succinic Acid
 Succinyl-CoA
 Tyrosine Metabolism
 Urea Cycle
 Valine, Leu./Isoleucine Deg
 1.1.1.37 Malate Dehydrogenase
 1.1.1.41 Isocitrate Dehydrogenase (NAD+)
 1.1.1.42 Isocitrate Dehydrogenase (NADP+)
 1.2.1.51 Pyruvate Dehydrogenase E1
 1.2.4.2 Oxoglutarate Dehydrogenase (Lipoamide)
 1.2.7.3 2-Oxoglutarate Synthase
 1.3.5.1 Succinate Dehydrogenase (Ubiquinone)
 1.3.99.1 Succinate Dehydrogenase

Citrate Cycle Kit B

1.8.1.4 Dihydrolipoamide Dehydrogenase
 2.3.1.12 Dihydrolipoyltransacetylase E2
 2.3.1.16 Acetyl-CoA C-Acyltransferase
 2.3.1.61 Dihydrolipoamide S-Succinyltransferase
 2.8.3.10 Citrate CoA-Transferase
 3.1.2.3 Succinyl-CoA Hydrolase
 4.1.1.32 Phosphoenolpyruvate Carboxykinase (GTP)
 4.1.1.49 Phosphoenolpyruvate carboxykinase (ATP)
 4.1.3.34 Citryl-CoA Lyase
 4.1.3.6 Citrate Lyase
 4.1.3.7 Citrate (S)-Synthase
 4.1.3.8 ATP Citrate (Pro-S)-Lyase
 4.2.1.2 Fumarate Hydratase
 4.2.1.3 Aconitate Hydratase
 6.2.1.18 Citrate--CoA Ligase
 6.2.1.4 Succinate--CoA Ligase (GDP-Forming)
 6.2.1.5 Succinate--CoA Ligase (ADP-Forming)
 6.4.1.1 Pyruvate Carboxylase

Metabolic Kit Catalog

Cysteine Metabolism Kit

2-Amino-Acrylate
3-Mercapto-Lactate
3-Mercapto-Pyruvate
3-Sulfino-L-Alanine
3-Sulfino-Pyruvate
3-Sulfopyruvate
D-Cysteine
Glutathione
L-Alanine
L-Cysteate
L-Cysteine
L-Cysteinyl-tRNA
L-Cystine
L-Serine
O-Acetyl-L-Serine
Pyruvate
S-Glutathionyl-L-Cysteine
S-Sulfo-L-Cysteine
Sulfate
Sulfide
Sulfite
Thiocysteine
Thiosulfate
1.1.1.27 L-Lactate Dehydrogenase
1.4.1 With NAD⁺ or NADP⁺ As Acceptor
1.6.4.1 Cystine Reductase (NADH)
1.6.4.6 CoA-Glutathione Reductase (NADPH)
1.8.4.3 Glutathione--CoA-Glutathione Transhydrogenase
1.8.4.4 Glutathione--Cystine Transhydrogenase
1.13.11.20 Cysteine Dioxygenase
2.3.1.30 Serine O-Acetyltransferase
2.6.1.1 Aspartate Transaminase
2.6.1.3 Cysteine Transaminase
4.1.1.12 Aspartate 4-Decarboxylase
4.2.1.13 L-Serine Dehydratase
4.2.99.8 Cysteine Synthase
4.2.99.9 O-Succinylhomoserine (thiol)-Lyase
4.2.99.10 O-Acetylhomoserine (thiol)-Lyase
4.4.1.1 Cystathionine Gamma-Lyase
4.4.1.8 Cystathionine Beta-Lyase
4.4.1.10 Cysteine Lyase
4.4.1.15 D-Cysteine Desulfhydrase
5.1.1.10 Amino-Acid Racemase
6.1.1.16 Cysteine--tRNA Ligase

C5-Branched Dibasic Acid Metabolism Kit

(3R)-Citramalate
(3S)-Citramalate
(3S)-Citramalyl-CoA
(S)-2-Acetolactate
Acetoin
2,3-Dimethylmalate
2-Methylene-Glutarate
2-Oxobutanoate
2-Oxoglutarate
4-Hydroxy-4-Methylglutamate
4-Methylene-2-Oxoglutarate
4-Methylene-L-Glutamine
4-Methyl-L-Glutamate
Acetate
Cis-Aconitate
Citraconate
D-Erythro-3-Methylmalate
Dimethylmaleate
D-Threo-3-Methylmalate
Glyoxylate
Itaconate
Itaconyl-CoA
L-Erythro-3-Methylmalyl-CoA
L-Glutamate
L-Threo-3-Methylaspartate
L-Threo-3-Methylmalate
L-Valine
Mesaconate
Mesaconyl-CoA
Methyl Itaconate
Methyloxaloacetate
Nicotinate
Parapyruvate
Propanol Phosphate
Propionyl-CoA
Pyruvate
2.8.3.11 Citramalate CoA-Transferase
2.8.3.7 Succinate--Citramalate CoA-Transferase
3.5.1.67 4-Methyleneglutaminase
4.1.1.5 Acetolactate Decarboxylase
4.1.1.6 Aconitate Decarboxylase
4.1.3.17 4-Hydroxy-4-Methyl-2-Oxoglutarate Aldolase
4.1.3.18 Acetolactate Synthase
4.1.3.22 Citramalate Lyase
4.1.3.25 Citramalyl-CoA Lyase
4.1.3.32 2,3-Dimethylmalate Lyase
4.2.1.34 (S)-2-Methylmalate Dehydratase
4.2.1.35 @-2-Methylmalate Dehydratase
4.2.1.56 Itaconyl-CoA Hydratase
4.2.1.85 Dimethylmaleate Hydratase
4.3.1.2 Methylaspartate Ammonia-Lyase
5.3.3.6 Methylitaconate Delta-Isomerase
5.4.99.1 Methylaspartate Mutase
5.4.99.4 2-Methyleneglutarate Mutase
6.2.1.5 Succinate--CoA Ligase (ADP-Forming)
6.3.1.7 4-Methyleneglutamate--Ammonia Ligase

Metabolic Kit Catalog

C21 Steroid Hormone Metabolism

11a-Hydroxy-Progesterone
11B,17a,21-Trihydroxy-5B-Pregnane-3,20-Dione
11B,17a,21-Trihydroxy-Pregnenolone
11B,21-Dihydroxy-2,20-Oxo-5B-Pregnan-18-Al
11B,21-Dihydroxy-5B-Pregnane-3,20-Dione
11B-Hydroxy-Progesterone
11-Dehydro-Corticosterone
11-Deoxycortisol(17a-Hydroxycortexone)
17a,20a-Dihydroxy-Cholesterol
17a,20a-Dihydroxy-Pregn-4-En-3-One
17a,21-Dihydroxy-5B-Pregnane-3,11,20-Trione
17a,21-Dihydroxy-Pregnenolone
17a-Hydroxy-Pregnenolone
17a-Hydroxy-Progesterone
18-Hydroxy-Corticosterone
20a,22B-Dihydroxy-Cholesterol
20a-Hydroxy-Cholesterol
20a-Hydroxy-Progesterone
21-Deoxycortisol
21-Hydroxy-5B-Pregnane-3,11,20-Trione
21-Hydroxypregnenolone
22B-Hydroxy-Cholesterol
3a,11B,21-Trihydroxy-20-Oxo-5B-Pregnan-18-Al
3a,20a,21-Trihydroxy-5B-Prenane-11-One
3a,21-Dihydroxy-5B-Pregnane-11,20-Dione
3a-Hydroxy-5B-Pregnane-20-One
4-Methylpentanal
5a-Pregnane-3,20-Dione
5B-Pregnane-3,20-Dione
Aldosterone
Cholesterol
Corticosterone
Cortisol
Cortisone
Cortol
Cortolone
Pregesterone
Pregnanediol
Pregnenolone
Tetrahydro-Corticosterone
Urocortisol
Urocortisone
1.1.1.50 3Alpha-Hydroxysteroid Dehydrogenase(B-Spec.)
1.1.1.53 3Alpha(or 20Beta)-Hydroxysteroid Dehydrogenase
1.1.1.145 3Beta-Hydroxy-Delta5-Steroid Dehydrogenase
1.1.1.146 11Beta-Hydroxysteroid Dehydrogeanse
1.3.1.3 Cortisone Beta-Reductase
1.3.1.23 Cholestenone 5Beta-Reductase
1.3.1.30 Progesterone 5Alph-Reductase
1.3.99.6 3-Oxo-5Beta-Steroid 4-Dehydorgenase
1.14.15.4 Steroid 11Beta-Monooxygenase
1.14.15.5 Corticosterone 18-Monooxygenase
1.14.15.6 Cholesterol Monooxygenase(Side-Chain-Cleaving)
1.14.99.9 Steroid 17Alpha-Monooxygenase
1.14.99.10 Steroid 21-Monooxygenase
1.14.99.14 Progesterone 11Alpha-Monooxygenase
5.3.3.1 Steroid Delta-Isomerase

D-Glutamine And D-Glutamate Metabolism Kit

2-Oxoglutarate
5-Glutamyl-D-Glutamyl-Peptide
5-Oxo-D-Proline
D-Glutamate
D-Glutamine
D-Glutamyl-Peptide
L-Glutamate
L-Glutamine
Poly-Gamma-D-Glutamate
UDP-MurNAc-L-Ala
UDP--MurNAc-L-Ala-D-Glu
UDP-N-Acetyl Muramate
1.4.1.3 Glutamate Dehydrogenase...
1.4.3.7 D-Glutamate Oxidase
2.3.2.1 D-Glutamyltransferase
3.5.1.2 Glutaminase
3.5.1.35 D-Glutaminase
3.5.1.38 Glutamin-(Asparagin-)Ase
4.2.1.48 D-Glutamate Cyclase
5.1.1.3 Glutamate Racemase
5.1.1.9 Arginine Racemase
5.1.1.10 Amino-Acid Racemase
6.3.2.8 UDP-N-Acetylmuramate....
6.3.2.9 UDP-N-Acetylmuramoylalanine....

D-Arginine And D-Ornithine Metabolism

1-Pyrroline-2-Carboxylate
2-Amino-4-Oxopentanoate
2-Oxo-5-Guanidino-Pentanoate
5-Amino-2-Oxopentanoate
Bacitracin
D-Arginine
D-Ornithine
D-Threo-2,4-Diaminopentanoate
L-Alanine
L-Arginine
L-Ornithine
1.2.1.12 Glyceraldehyde-3-Phosphate Dehydrogenase ...
1.4.1.12 2,4-Diaminopentanoate Dehydrogenase
1.4.3.3 D-Amino-Acid Oxidase
2.3.1 Acyltransferases
2.6.1.21 D-Alanine Transaminase
3.5.3.10 D-Arginase
5.1.1.9 Arginine Racemase
5.1.1.10 Amino-Acid Racemase
5.1.1.12 Ornithine Racemase
5.4.3.5 D-Ornithine 4,5-Aminomutase

Metabolic Kit Catalog

1,2-Dichloroethane Degradation

1,2-Dichloroethane
2-Chloroethanol
Chloroacetaldehyde
Chloroacetic Acid
Glycolate
1.1.99.8 Alcohol Dehydrogenase(Acceptptor)
1.2.1.3 Aldehyde Dehydrogenase(NAD+)
3.8.1.3 Haloacetate Dehalogenase
3.8.1.5 Haloalkane Dehalogenase

1,1,1-Trichloro-2,2-Bis(4-Chlorophenyl)ethane (DDT) Kit

1.2 Acting On The Aldehyde Or Oxo Group Of Donors
1.3 Acting On The CH-CH Group Of Donors
1.3.1 With NAD+ Or NADP+ As Acceptor
1.13.11 With Incorporation Of Two Atoms Of Oxygen
1.14.99 Miscellaneous
1.97.1 Other Oxidoreductases
3.7.1 In Ketonic Substances
4.1.1 Carboxy-Lyases
4.5.1 Carbon-Halide Lyases
4.5.1.1 DDT-Dehydrochlorinase

Xylene Degradation Kit

1,2-Dihydroxy-3-Methylcyclohexa-3,5-Dienecarboxylate
1,2-Dihydroxy-6-Methylcyclohexa-3,5-Dienecarboxylate
2-Hydroxy-5-Methyl-Cis,Cis-Muconate
2-Hydroxy-5-Methyl-Cis,Cis-Muconic Semialdehyde
2-Methylbenz Aldehyde
2-Methylbenzyl Alcohol
2-Oxo-5-Methyl-Cis-Muconate
2-Oxohex-Trans-4-Enoate
3-Methylbenz Aldehyde
3-Methylbenzyl Alcohol
3-Methylcatechol
3-Methyl-Cis,Cis-Hexadienedioate
4-Hydroxy-2-Oxohexanoate
4-Methylbenz-Aldehyde
4-Methylbenzyl Alcohol
4-Methylcatechol
4-Methyl-Muconolactone
Cis-1,2-Dihydroxy-4-Methylcyclohexa-3,5-Diene-1-Carboxylate
M-Toluate
M-Xylene
O-Toluate
O-Xylene
Propanal
P-Toluate
P-Xylene
Pyruvate
Toluene-4-Sulfonate
1.1.1.90 Aryl-Alcohol Dehydrogenase
1.2.1.7 Benzaldehyde Dehydrogenase(NADP+)
1.2.1.28 Benzaldehyde Dehydrogenase(NAD+)
1.13.11.1 Catechol 1,2-Dioxygenase
1.13.11.2 Catechol 2,3-Dioxygenase
1.18.1.3 Ferredoxin--NAD+ Reductase
3.7.1.9 2-Hydroxymuconate-Semialdehyde Hydrolase
4.1.1.77 4-Oxalocrotonate Decarboxylase
4.2.1 Hydro-Lyases
5.5.1.1 Muconate Cycloisomerase

1,4-Dichlorobenzene Degradation

1,2,4-Benzenetriol
1,4-Dichlorobenzene
2,3,5,6-Tetrachlorohydroquinone
2,3,6-Trichlorohydroquinone
2,4,5-Trichlorophenoxyacetic Acid
2,4,5-Trichlorophenol
2,4,6-Trichlorophenol
2,4-Dichloro-Cis,Cis-Muconate
2,4-Dichlorophenol
2,4-Dichlorophenoxyacetic Acid
2,5-Dichloro-Cis,Cis-Muconate
2,5-Dichlorohydroquinone
2,6-Dichlorohydroquinone
2,6-Dichlorophenol
2-Chloromaleylacetate
2-Hydroxy-1,4-Benzoquinone
2-Hydroxymuconic Semialdehyde
2-Hydroxypenta-2,4-Dienoate
3,5-Dichlorocatechol
3,6-Dichlorocatechol
3,6-Dichloro-Cis-1,2-Dihydroxycyclohexa-3,5-Diene
3-Chloro-Cis,Cis-Muconate
3-Oxo adipate
4-Chlorocatechol
4-Chlorophenol
4-Chlorophenoxyacetate
4-Hydroxy-2-Oxovalerate
4-Methylenebut-2-En-4-olide
5-Chloro-1,2,4-Trihydroxybenzene
5-Chloro-2-Hydroxymuconic Semialdehyde
6-Chlorohydroxyquinol
Acetaldehyde
Cis-2-Cholordienelactone
Cis-4-Carboxymethylenebut-2-En-4-olide
Cis-Acetylacrylate
Glyoxylate
Maleylacetate
Pentachlorophenol
Pyruvate
Trans-2-Cholordienelactone
1.3.1.32 Maleylacetate Reductase
1.6.5 With Quinone Or Related Compound As Acceptor
1.13.11 With Incorporation Of Two Atoms Of Oxygen
1.13.11.1 Catechol 1,2-Dioxygenase
1.13.11.37 Hydroxyquinol 1,2-Dioxygenase
1.14.13 With NADH Or NADPH As One Donor.....
1.14.13.20 2,4-Dichlorophenol 6-Monooxygenase
1.14.13.50 Pentachlorophenol Monooxygenase
1.97.1 Other Oxidoreductases
3.1.1.45 Carboxymethylenebutenolidase
3.7.1.9 2-Hydroxymuconate-Semialdehyde Hydrolase
4.1.2 Aldehyde-Lyases
4.2.1.80 2-Oxopent-4-Enoate Hydratase
4.5.1 Carbon-Halide Lyases
5.2.1.10 2-Chloro-4-Carboxymethylenebut-2-En-1,4-Olide Isomerase
5.5.1.1 Muconate Cyloisomerase
5.5.1.7 Chloromuconate Cyloisomerase
5.5.1.11 Dichloromuconate Cyloisomerase

Metabolic Kit Catalog

2,4-Dichlorobenzoate Degradation Kit

2,4-Dichlorobenzoate
2,4-Dichlorobenzoyl-CoA
3,4-Dihydroxybenzoate
3-Carboxy-Cis,Cis-Muconate
3-Hydroxybenzoate
3-Sulfomuconate
4,5-Dihydroxyphthalate
4-Aminobengenesulfonate
4-Aminobenzoate
4-Carboxy-2-Hydroxymuconate Semialdehyde
4-Carboxy-4'-Sulfoazobenzene
4-Chlorobenzoate
4-Chlorobenzoyl-CoA
4-Hydroxybenzoate
4-Hydroxybenzoyl-CoA
4-Hydroxyphthalate
4-Methoxybenzoate
4-Sulfobenzaldehyde
4-Sulfobenzoate
4-Sulfobenzyl Alcohol
4-Sulfocatechol
4-Sulfolactone
Maleylacetate
P-Aminophenol
Phthalate
Phthalate-4,5-Cis-Dihydrodiol
Terephthalate 1,2-Cis-Dihydrodiol
Terephthalate
Toluene-4-Sulfonate
Vanillate
Vanillin
Vanillyl Alcohol
1.1.3.38 Vanillyl-Alcohol Oxidase
1.2.3.9 Aryl-Aldehyde Oxidase
1.6.6 With A Nitrogenous Group As Acceptor
1.13.11 With Incorporation Of Two Atoms Of Oxygen
1.13.11.3 Protocatechuete 3,4-Dioxygenase
1.13.11.8 Protocatechuete 4,5-Dioxygenase
1.14.12 With NADH Or NADPH As One Donor, And
1.14.12.7 Phthalate 4,5-Dioxygenase
1.14.12.8 4-Sulfobenzoate 3,4-Dioxygenase
1.14.12.15 Terephthalate 1,2-Dioxygenase
1.14.13.2 4-Hydroxybenzoate 3-Monooxygenase
1.14.13.23 3-Hydroxybenzoate 4-Monooxygenase
1.14.13.27 4-Aminobenzoate 1-Monooxygenase
1.14.13.33 4-Hydroxybenzoate 3-Monooxygenase...
1.14.99.15 4-Methoxybenzoate Monooxygenase....
3.1.1 Carboxylic Ester Hydrolases
3.1.1.45 Carboxymethylenebutenolidase
3.1.2.23 4-Hydroxybenzoyl-CoA Thioesterase
3.8.1.7 4-Chlorobenzoyl-CoA Dehalogenase
4.1.1.55 4,5-Dihydroxyphthalate Decarboxylase
5.5.1 These Catalyse Reactions In Which A Group....
6.2.1.33 4-Chlorobenzoate-CoA Ligase

Ethylbenzene Degradation Kit

1-Phenylethanol
2,3-Dihydroxy-Ethylbenzene
2-Hydroxy-6-Oxooceta-2,4-Dienoate
2-Hydroxy-Acetophenone
4-Hydroxy-2-Oxovalerate
Acetaldehyde
Acetophenone
Acetyl-CoA
Benzoylacetate
Benzoylacetyl-CoA
Benzoyl-CoA
Cis-2,3-Dihydroxy-2,3-Dihydroethylbenzene
Cis-2-Hydroxypenta-2,4-Dienoate
Ethylbenzene
Propanoate
Pyruvate
Styrene
1.14.12.12 Naphthalene 1,2-Dioxygenase
2.3.1 Acyltransferases
4.1.2 Aldehyde-Lyases
4.2.1.80 2-Oxopent-4-Enoate Hydratase
6.2.1 Acid-Thiol Ligases
6.4.1 Forming Carbon-Carbon Bonds
Caprolactam Degradation Kit
2-Hydroxy Cyclohexan-1-One
6-Aminohexanoate
6-Hexanolide
6-Hydroxyhexanoate
Adipate
Adipate Semialdehyde
Co2
Cyclohexane 1,2-Dione
Cyclohexanol
Cyclohexanone
Epsilon-Caprolactam
Trans-Cyclohexane-1,2-Diol
1.1.1.2 Alcohol Dehydrogenase(NADP+)
1.1.1.90 Aryl-Alcohol Dehydrogenase
1.1.1.174 Cyclohexane-1,2-Diol Dehydrogenase
1.1.1.245 Cyclohexanol Dehydrogenase
1.2.1.4 Aldehyde Dehydrogenase(NADP+)
1.14.13.22 Cyclohexanone Monooxygenase
2.6.1 Transaminases
3.1.1.17 Gluconolactonase
3.5.2 In Cyclic Amides
3.7.1 In Ketonic Substances

Metabolic Kit Catalog

Fatty Acid Kit A

Acetoacetyl-CoA
 (S)-3-Hydroxy-Butanoly-CoA
 Trans-But-2-Enoyl-CoA
 Glutaryl-CoA
 Glutarate
 Butanoyl-CoA
 CoA
 3-Oxo-Hexanoyl-CoA
 (S)-3-Hydroxy-Hexanoyl-CoA
 Trans-Hex-2-Enoyl-coA
 Hexanoyl-CoA
 3-Oxo-Octanoyl-CoA
 (S)-3-Hydroxy-Octanoyl-CoA
 Trans-Oct-2-Enoyl-CoA
 Octanoyl-CoA
 3-Oxo-Dacanoyl-CoA
 (S)-3-Hydroxy-Decanoly-CoA
 Trans-Dec-2-Enoyl-CoA
 Decanoyl-CoA
 3-Oxo-Dodecanoyl-CoA
 (S)-3-Hydroxy-Dodecanoyl-CoA
 Trans-Dodec-2-Enoyl-CoA
 Dodecanoyl-CoA
 3-Oxo-Tetra-Decanoyl-CoA
 (S)-3-Hydroxy-Tetra-Decanoyl-CoA
 Trans-Tetra-Dec-2-Enoyl-CoA
 Tetra-Decanoyl-CoA
 3-Oxo-Hexa-Decanoyl-CoA
 (S)-3-Hydroxy-Hexa-Decanoyl-CoA
 Trans-Hexa-Dec-2-Enoyl-CoA
 Hexa-Decanoyl-CoA
 L-Palmitoyl-Carnitine
 Hexadecanoate(Fatty Acid)
 16-Hexadecanal
 16-Hexadecanol
 Long-Chain-Fatty Acid
 Long-Chain-Acyl-(ACP)
 (Acyl-Carrier Protein)
 Cis,Cis-3,6-Dodecadienoyl-CoA
 Trans,Cis-Lauro-2,6-Dienoyl-CoA
 @-3-Hydroxycapryloyl-CoA
 (S)-3-Hydroxycapryloyl-CoA
 Alkane
 1-Alcohol
 Aldehyde
 Fatty Acid
 W-Hydroxy Fatty Acid
 Rubredoxin (Red)
 Rubredoxin (Ox)
 A-Hydroxy Fatty Acid
 1.1.1.1 With NAD+ as Acceptor
 1.1.1.35 3-Hydroxyacyl-CoA Dehydrogenase
 1.1.1.192 Long-Chain-Alcohol Dehydrogenase
 1.1.1.211 Long-Chain-3-Hydroxyacyl-CoA Dehydrogenase
 1.1.99.20 Alkan-1-0a Dehydrogenase (Acceptor)
 1.2.1.3 Aldehyde Dehydrogenase (NAD+)
 1.2.1.48 Long-Chain-Aldehyde Dehydrogenase
 1.2.99.3 Aldehyde Dehydrogenase(Pyrroloquinoliine-Quinone)
 1.3.3.6 Acyl-CoA Oxidase
 1.3.99.2 Butyryl-CoA Dehydrogenase

Fatty Acid Kit B

1.3.99.3 Acyl-CoA Dehydrogenase
 1.3.99.7 Glutaryl-CoA Dehydrogenase
 1.3.99.13 Long-Chain-Acyl-CoA Dehydrogenase
 1.14.14.1 Unspecific Monooxygenase
 1.14.15.3 Alkane 1-Monooxygenase
 1.18.1.1 Rubredoxin--NAD+ Reductase
 1.18.1.3 Ferredoxin--NAD+Reductase
 1.18.1.4 Rubredoxin--NAD(P)+ Reductase
 2.3.1.9 Acetyl-CoA C-Acetyltransferase
 2.3.1.16 Acetyl-CoA C-Acyltransferase
 2.3.1.21 Carnitine O-Palmitoyltransferase
 4.2.1.17 Enoyl-coA Hydratase
 4.2.1.74 Long-Chain-Enoyl-CoA Hydratase
 5.1.2.3 3-Hydroxybutyryl-CoA Epimerase
 5.3.3.8 Dodecenoyl-CoA Delta-Isomerase
 6.2.1.3 Long-Chain-Fatty-Acid--CoA Ligase
 6.2.1.6 Glutarate--CoA Ligase
 6.2.1.20 Long-Chain-Fatty-Acid--(ACP) Ligase

Metabolic Kit Catalog

Fatty Acid Biosynthesis (Path 1) Kit

3-Hydroxy-Butanoyl-(ACP)
 3-Hydroxy-Decanoyl-(ACP)
 3-Hydroxy-Dodecanoyl-(ACP)
 3-Hydroxy-Hexadecanoyl-(ACP)
 3-Hydroxy-Hexanoyl-(ACP)
 3-Hydroxy-octanoyl-(ACP)
 3-Hydroxy-Tetra-Decanoyl-(ACP)
 3-Oxo-Hexadecanoyl-(ACP)
 3-Oxo-Decanoyl-(ACP)
 3-Oxo-Dodecanoyl-(ACP)
 3-Oxo-Hexanoyl-(ACP)
 3-Oxo-Octanoyl-(ACP)
 3-Oxo-Tetra-Decanoyl-(ACP)
 Acetoacetyl-(ACP)
 Acetyl-(ACP)
 Acetyl-CoA
 ACP(Acyl-CarrierProtein)
 Biotin-Carboxyl-Carrier Protein
 But-2-Enoyl-(ACP)
 Butyryl-(ACP)
 Carboxybiotin-Carboxyl-Carrier Protein
 Decanoyl-(ACP)
 Dodecanoyl-(ACP)
 Hexadecanate
 Hexa-Decanoyl-(ACP)
 Malonyl-(ACP)
 Malonyl-CoA
 Octanoyl-(ACP)
 Tetra-Decanoyl-(ACP)
 Trans-Dec-2-Enoyl-(ACP)
 Trans-Dodec-2-Enoyl-(ACP)
 Trans-Hex-2-Enoyl-(ACP)
 Trans-Hexa-Dec-2-Enoyl-(ACP)
 Trans-Oct-2-Enoyl-(ACP)
 Trans-Tetra-Dec-2-Enoyl-(ACP)
 1.1.1.100 3-Oxoacyl-(ACP) Reductase
 1.3.1.9 Enoyl-(ACP)Reductase(NADH)
 1.3.1.10 Enoyl-(ACP)Reductase (NADPH, B-Specific)
 2.3.1.38 (ACP)S-Acetyltransferase
 2.3.1.39 (ACP)S-Malonyltransferase
 2.3.1.41 3-Oxoacyl-(ACP)Synthase
 2.3.1.85 Fatty-Acid Synthase
 2.3.1.86 Fatty-Acyl-CoA Synthase
 3.1.2.14 Oleoyl-(ACP)Hydrolase
 4.2.1.61 3-Hydroxypalmitoyl-(ACP)Dehydratase
 6.3.4.14 Biotin Carboxylase
 6.4.1.2 Acetyl-CoA Carboxylase

Fatty Acid Biosynthesis (Path 2) Kit

(S)-3-Hydroxy-Butanoyl-CoA
 (S)-3-Hydroxy-Decanoyl-CoA
 (S)-3-Hydroxy-Dodecanoyl-CoA
 (S)-3-Hydroxy-Hexa-Decanoyl-CoA
 (S)-3-Hydroxy-Hexanoyl-CoA
 (S)-3-Hydroxy-Octanoyl-CoA
 (S)-3-Hydroxy-Tetra-Decanoyl-CoA
 3-Oxo-Decanoyl-CoA
 3-Oxo-Dodecanoyl-CoA
 3-Oxo-Hexa-Decanoyl-CoA
 3-Oxo-Hexanoyl-CoA
 3-Oxo-Octanoyl-CoA
 3-Oxo-Tetra-Decanoyl-CoA
 Acetoacetyl-CoA
 Acetyl-CoA
 Butanoyl-CoA
 Crotonoyl-CoA
 Decanoyl-CoA
 Dodecanoyl-CoA
 Hexadecanoate
 Hexa-Decanoyl-CoA
 Hexanoyl-CoA
 Octanoyl-CoA
 Tetra-Decanoyl-CoA
 Trans-Dec-2-Enoyl-CoA
 Trans-Dodec-2-Enoyl-CoA
 Trans-Hex-2-Enoyl-CoA
 Trans-Hexadec-2-Enoyl-CoA
 Trans-Oct-2-Enoyl-CoA
 Trans-Tetradec-2-Enoyl-CoA
 1.1.1.35 3-Hydroxyacyl-CoA Dehydrogenase
 1.3.1 With NAD⁺ OR NADP⁺ As Acceptor
 1.3.1.44 Trans-2-Enoyl-CoA Reductase (Snad+)
 2.3.1.9 Acetyl-CoA C-Acetyltransferase
 2.3.1.16 Acetyl-CoA C-Acyltransferase
 3.1.2.14 Oleoyl-(ACP) Hydrolase
 4.2.1.17 Enoyl-CoA Hydratase

Metabolic Kit Catalog

Flavonoids, Stilbene And Lignin Bios. Kit A

2-Coumarinate
 3-(2-Carboxylethenyl)-Cis,Cis-Muconate
 3,3',4',5-Tetrahydroxystilbene
 3,4',5-Trihydroxystilbene
 3,4-Dihydroxy-Styrene
 3-Deoxyleucocyanidin
 3-Methoxyapigenin
 3-Methoxyluteolin
 3'-O-Methyluteolin
 4-Hydroxycinnamoyl-CoA
 4-Hydroxycinnamyl Alcohol
 4-Hydroxycinnamyl Alcohol 4-D-Glucoside
 4-Hydroxycinnamyl Aldehyde
 4-Hydroxystyrene
 5-Hydroxyferulate
 Acacetin
 Apigenin
 Apigenin 7-O-Glucoside
 Apiin
 Beta-D-Glucosyl-2-Coumarate
 Beta-D-Glucosyl-2-Coumarinate
 Caffeoyl-CoA
 Chalcone
 Chlorogenate
 Cinnamaldehyde
 Cinnamoyl-CoA
 Cis-3,4-Leucopelargonidin
 Coniferin
 Coniferyl Alcohol
 Coniferyl Aldehyde
 Coumarine
 Cyanidin
 Delphinidin
 Dihydrokaempferol
 Dihydromyricetin
 Dihydroquercetin
 Eriodictyol
 Ferulate
 Feruloyl-coA
 Kaempferol
 Leucocyanidin
 Leucodelphinidin
 Lignin
 Luteolin
 Luteolin 7-O-Glucoside
 Malonylapiin
 Naringenin
 Pelargonidin
 Pentahydroxyflavanone
 Pinosylvin
 Protocatechuate-Aldehyde
 Quercetin
 Quercetin 3-O-Glucoside
 Rutin
 Scopoletin
 Scopolin
 Sinapate
 Sinapoyl-CoA
 Sinapoyl Alcohol
 Sinapoyl Aldehyde

Flavonoids, Stilbene And Lignin Biosynth. Kit B

Syringin
 Trans-2-Hydroxycinnamate
 Trans-4-Hydroxycinnamate
 Trans-Caffeate
 Trans-Cinnamate
 1.1.1.194 Coniferyl-Alcohol Dehydrogenase
 1.1.1.195 Cinnamyl-Alcohol Dehydrogenase
 1.1.1.219 Dihydrokaempferol 4-Reductase
 1.1.1.234 Flavanone 4-Reductase
 1.2.1.44 Cinnamoyl-CoA Reductase
 1.3 Acting On The CH-CH Group Of Donors
 1.11.1.7 Peroxidase
 1.13.11 With Incorporation Of Two Atoms Of Oxygen
 1.13.11.22 Caffeate 3,4-Dioxygenase
 1.14 Acting On Paired Donors With...
 1.14.11.9 Naringenin 3-Dioxygenase
 1.14.13 With NADH Or NADPH As One Donor, And ...
 1.14.13.11 Trans-Cinnamate 4-Monooxygenase
 1.14.13.14 Trans-Cinnamate 2-Monooxygenase
 1.14.13.21 Flavonoid 3-Monooxygenase
 1.14.18.1 Monophenol Monooxygenase
 2.1.1.42 Luteolin O-Methyltransferase
 2.1.1.68 Caffeate O-Methyltransferase
 2.1.1.75 Apigenin 4-O-Methyltransferase
 2.1.1.76 Quercetin 3-O-Methyltransferase
 2.1.1.104 Caffeoyl-CoA O-Methyltransferase
 2.3.1.74 Naringenin-Chalcone Synthase
 2.3.1.95 Trihydroxystilbene Synthase
 2.3.1.99 Quinate O-Hydroxycinnamoyltransferase
 2.3.1.115 Isoflavone-7-O-Beta-Glucoside 6"-O-Malonyltransferase
 2.3.1.146 Pinosylvin Synthase
 2.4.1.81 Flavone 7-O-Beta-Glucosyltransferase
 2.4.1.91 Flavonol 3-O-Glucosyltransferase
 2.4.1.111 Coniferyl-Alcohol Glucosyltransferase
 2.1.1.114 2-Coumarate O-Beta-Glucosyltransferase
 2.4.1.128 Scopoletin Glucosyltransferase
 2.4.2.25 Flavone Apiosyltransferase
 3.2.1.21 Beta-Glucosidase
 4.1.1 Carboxy-Lyases
 5.2.1 Cis-Trans-Isomerases
 5.5.1.6 Chalcone Isomerase

Metabolic Kit Catalog

Fluorene Degradation Kit

(+)-(3S,4R)-cis-3,4-Dihydroxy-3,4-Dihydrofluorene
1,2-Dihydroxyfluorene
1-Formyl-2-Indanone
1-Indanone
2,2',3-Trihydroxybiphenyl
2,2',3-Trihydroxydiphenylether
2-Formyl-1-Indanone
2-Hydroxy Muconate
2-Hydroxy-4-(1-Oxo-1,3-Dihydro-2H-Inden-2-Ylidene)But-2-Enoic Acid
2-Hydroxy-4-(2-Oxo-1,3-Dihydro-2H-Inden-1-Ylidene)But-2-Enoic Acid
2-Hydroxy-6-Oxo-6-(2-hydroxyphenoxy)-Hexa-2,4-Dienoate
2-Hydroxy-6-Oxo-6-(2-Hydroxyphenyl)-Hexa-2,4-Dienoate
2-Indanone
2-Oxopent-4-Enoate
3-(2-Hydroxyphenyl)Propionate
3,4-Dihydrocoumarin
3,4-Dihydroxy-3,4-Dihydro-9-Fluorenone
3,4-Dihydroxyfluorene
3-Hydroxy-1-Indanone
3-Isochromanone
4-Hydroxy-2-Oxopentanoate
4-Hydroxy-9-Fluorenone
9-Fluorenol
9-Fluorenone
Acetaldehyde
Catechol
Dibenzofuran
Dibenzo-P-Dioxin
Fluorene
Gamma-Oxalocrotonate
Pyruvate
Salicylate
1.13.11 With Incorporation Of Two Atoms Of Oxygen
1.14 Acting On Paired Donors
1.14.12 With NADH Or NADPH As One Donor...
1.14.12.12 Napthalene 1, 2-Dioxygense
3.7.1.8 2,6-Dioxy-6-Phenylhexa-3-Enoate Hydrolase
4.1.1 Carboxy-Lyases
4.1.1.77 4-Oxalocrotonate Decarboxylase
4.2.1.80 2-Oxopent-4-Enoate Hydratase
5.3.3 Transposing C-C Bonds

Metabolic Kit Catalog

Folate Biosynthesis Kit A

10-Formyl-THD-Polyglutamate
10-Formyl-THF
10-Formyl-THF-L-Glutamate
2,5-Diamino-6-(5'-Triphosphoryl-3',4'-Trihydroxy-2'-Oxopentyl)-Amino-4-Oxopyrimidine
2,5-Diaminopyrimidine Nucleoside Triphosphate
2-Amino-4-Hydroxy-6-(Erythro-1,2,3-Trihydroxypropyl)-Dihydropteridine Triphosphate
2-Amino-4-Hydroxy-6-Hydroxymethyl-7,8-Dihydropteridine
2-Amino-4-Hydroxy-6-Hydroxymethyl-7,8-Dihydropteridine-P2
4-Aminobenzoate
5,10-Methenyl-THMPT
5,10-Methylene-THMPT
5,6,7,8-Tetrahydro-Methanopterin(THMPT)
5,6,7,8-Tetrahydrobiopterin
5,6,7,8-Tetrahydrofolate(THF)
5-Methyl-THMPT
6-(3'-Triphosphoryl-1'-Methylglycerly)-7-Methyl-7,8-Dihydrobiopterin
6-Lactoyl-5,6,7,8-Tetrahydropterin
6-Pyruvoyl-5,6,7,8-Tetrahydropterin
7,8-Dihydrofolate(DHF)
7,8-Dihydro-Methanopterin
7,8-Dihydropteroate
Chorismate
Coenzyme F420
Coenzyme F420H2
Coenzyme M
Coenzyme M-HTP Heterodisulfide
Dihydrobiopterin
Dihydroneopterin
Dihydroneopterin Phosphate
Folate
Formamidepyrimidine Nucleoside Triphosphate
Formyl-MFR
GTP
HTP
Methane
Methanofuran(MFR)
Methyl-CoM
Molybdopterin
N5-Formyl-THMPT
Neopterin
THF-L-Glutamate
THF-Polyglutamate
1.1.1.153 Sepiapterin Reductase
1.1.1.220 6-Pyruvoyltetrahydropterin 2'-Reductase
1.2.99.5 Formylmethanofuran Dehydrogenase
1.5.1.3 Dihydrofolate Reductase
1.5.99.9 Methylene tetrahydropterin Dehydrogenase
1.6.99.7 Dihydropteridine Reductase
1.8 Acting On A Sulfur Group Of Donors
1.12.99.1 Coenzyme F420 Hydrogenase
1.12.99.2 Coenzyme-M-7-Mercaptoheptanoylthreonine-Phosphate-Heterodisulfide Hydrogenase
2.1.1.45 Thymidylate Synthase
2.1.1.86 Tetrahydropterin S-Methyltransferase
2.3.1.101 Formylmethanofuran--Tetrahydropterin N-Formyltransferase
2.5.1.5 Galactose-6-Sulfurylase
2.5.1.5 Galactose-6-Sulfurylase
2.7.6.3 2-Amino-4-Hydroxy-6-Hydroxymethyl dihydropteridine..
3.1.3.1 Alkaline Phosphatase
3.4.19.9 Gamma-Glu-X Carboxypeptidase
3.5.4.16 GTP Cyclohydrolase I

Folate Biosynthesis Kit B

3.5.4.27 Methyltetrahydropterin Cyclohydrolase
3.6.1 In Phosphorus-Containing Anhydrides
4.1.2.25 Dihydroneopterin Aldolase
4.1.3 Oxo-Acid-Lyases
4.6.1.10 6-Pyruvoyl Tetrahydrobiopterin Synthase
6.3.2.12 Dihydrofolate Synthase
6.3.2.17 Tetrahydrofolylpolyglutamate Synthase
6.3.4.3 Formate--Tetrahydrofolate Ligase

Metabolic Kit Catalog

Fructose And Mannose Metabolism Kit A

Gamma Dimer
 1,4-B-Mannan
 2-Dehydro-3-Deoxy-D-Fuconate
 2-Dehydro-3-Deoxy-L-Rhamnonate
 ADPMannose
 Alginate
 B-D-Fructose-1-6P2
 B-D-Fructose-6P
 D-Fructose
 D-Fructose(Extrace Llular)
 D-Fructose-1P
 D-Fructose-2,6P2
 D-Fructose-2P
 D-Fuconate
 D-Fucono-1,4-Lactone
 D-Fucose
 D-Glucose
 D-Glyceraldehyde
 D-Iditol
 D-Lactaldehyde
 D-Mannitol
 D-Mannitol (Extrace Llular)
 D-Mannitol-1P
 D-Mannose
 D-Mannose(Extrace Llular)
 D-Mannose-1P
 D-Mannose-6P
 D-Sorbitol
 D-Sorbitol-6P
 Fructan
 GDP-4-oxo-6-Deoxy-D-mannose
 GDP-4-oxo-L-Fucose
 GDP-6-Doexy-D-talose
 GDP-D-Mannose
 GDP-D-Mannuronate
 GDP-D-Rhamnose
 GDP-L-Fucose
 Glyceraldehyde-3P
 Glycerone-P
 L-Fucose
 L-Fucose-1P
 L-Lactaldehyde
 L-Rhamno-1,4-Lactone
 L-Rhamnofuranose
 L-Rhamnonate
 L-Rhamnose
 L-Rhamnulose
 L-Rhamnulose-1P
 L-Sorbitol
 L-Sorbose
 L-Sorbose(Extrace Llular)
 L-Sorbose-1P
 Mannan
 1.1.1 With NAD+ or NADP+ as Acceptor
 1.1.1.11 D-Arabinitol 4-Dehydrogenase
 1.1.1.120 Galactose 1-Dehydrogenase (NADP+)
 1.1.1.132 GDPMannose 6-Dehydrogenase
 1.1.1.135 GDP-6-Deoxy-D-Talose 4-Dehydrogenase
 1.1.1.138 Mannitol 2-Dehydrogenase (NADP+)

Fructose And Mannose Metabolism Kit B

1.1.1.14 L-Iditol 2-Dehydrogenase
 1.1.1.140 Sorbitol-6-Phosphate 2-Dehydrogenase
 1.1.1.15 D-Iditol 2-Dehydrogenase
 1.1.1.17 Mannitol-1-Phosphate 5-Dehydrogenase
 1.1.1.173 L-Rhamnose 1-Dehydrogenase
 1.1.1.187 GDP-4-Dehydro-D-Rhamnose Reductase
 1.1.1.21 Aldehyde Reductase
 1.1.1.67 Mannitol 2-Dehydrogenase
 1.1.2.2 Mannitol Dehydrogenase (Cytochrome)
 1.1.99.21 D-Sorbitol Dehydrogenase
 2.4.1 Hexosyltransferases
 2.4.1.32 Glucomannan 4-Beta-Mannosyltransferase
 2.4.1.33 Alginate Synthase
 2.7.1.1 Hexokinase
 2.7.1.105 6-Phosphofructo-2-Kinase
 2.7.1.11 6-Phosphofructokinase
 2.7.1.2 Glucokinase
 2.7.1.28 Triokinase; Triose Kinase
 2.7.1.3 Ketoheokinase
 2.7.1.4 Fructokinase
 2.7.1.5 Rhamnulokinase
 2.7.1.51 L-Fuculokinase
 2.7.1.52 Fucokinase
 2.7.1.56 1-Phosphofructokinase
 2.7.1.69 Protein-N(Pai)-Phosphohistidine....
 2.7.1.7 Mannokinase
 2.7.1.90 Pyrophosphate--Fructose-6-Phosphate1...
 2.7.7.13 Mannose-1-Phosphate Guanylyltransferase
 2.7.7.22 Mannose-1-Phosphate Guanylyltransferase(GDP)
 2.7.7.30 Fucose-1-Phosphate Guanylyltransferase
 3.1.1.15 L-Arabinonolactonase
 3.1.1.65 L-Rhamnono-1,4-Lactonase
 3.1.3.11 Fructose-Bisphosphatase
 3.1.3.22 Mannitol-1-Phosphatase
 3.1.3.46 Fructose-2,6-Bisphosphate 2-Phosphatase
 3.1.3.54 Fructose-2,6-Bisphosphate 6-Phosphatase
 3.2.1.137 Mannan Exo-1,2-1,6-Alpha-Mannosidase
 3.2.1.77 Mannan 1, 2-(1,3)-Alpha-Mannosidase
 3.2.1.78 Mannan Endo-1,4-Beta-Mannosidase
 3.2.1.80 Fructan Beta-Fructosidase
 3.6.1.21 ADPSugar Pyrophosphatase
 4.1.2.13 Fructose-Bisphosphate Aldolase
 4.1.2.17 L-Fuculose-Phosphate Aldolase
 4.1.2.18 2-Dehydro-3-Deoxy-L-Pentonate Aldolase
 4.1.2.19 Rhamnulose-1-Phosphate Aldolase
 4.2.1 Hydro-Lyases
 4.2.1.47 GDPMannose 4, 6-Dehydratase
 4.2.1.67 D-Fuconate Hydratase
 4.2.1.90 L-Rhamnonate Dehydratase
 4.2.2.3 Poly(beta-D-Mannuronate) Lyase
 5.1.3 Acting on Carbohydrates and Derivatives
 5.3.1 Interconverting Aldoses and Ketoses
 5.3.1.1 Triose-Phosphate Isomerase
 5.3.1.14 L-Rhamnose Isomerase
 5.3.1.25 L-Fucose Isomerase
 5.3.1.5 Xylose Isomerase
 5.3.1.7 Mannose Isomerase
 5.3.1.8 Mannose-6-Phosphate Isomerase
 5.4.2.8 Phosphomannomutase

Metabolic Kit Catalog

Galactose Metabolism Kit A

2-Dehydro-3-Deoxy-D-Galactonate
2-Dehydro-3-Deoxy-D-Galactonate-6P
3-Keto-B-D-Galactose
3-Ketolactose
a-D-Galactose-1P
a-D-Glucose
a-D-Glucose-1P
a-D-Glucose-6P
B-D-Galactose
B-D-Glucose
D-Fructose
D-Gala1-6D-Glucose
D-Galactonate
D-Galactono-1,4-lactone
D-Galactose
D-Galactose-6P
D-Gala-1-6D-Gala1-6D-Glucose
D-Glucose
D-Glyceraldehyde-3P
D-Mannose
D-Myo-Inositol
D-Sorbitol
D-Tagatose
D-Tagatose-1,6P2
D-Tagatose-6P
Epimelibiose
Galactan
Galactinol
Galactitol
Galactosyl-Glycerol
Glycerol
Glycerone-P
Lactose
Lactose(Extrace Llular)
Lactose-6P
Melibiitol
Melibiose
Raffinose
Stachyose
Sucrose
UDP Galactose
UDP Gluconse
1.1.1 With NAD+ or NADP+ As Acceptor
1.1.1.120 Galactose 1-Dehydrogenase (NADP+)
1.1.1.16 Galactitol 2-Dehydrogenase
1.1.1.21 Aldehyde Reductase
1.1.1.48 Galactose 1-Dehydrogenase
1.1.3.9 Galactose Oxicase
1.1.99.13 Glucoside 3-Dehydrogenase
2.4.1.123 Inositol 1-Alpha-Galactosyltransferase
2.4.1.17 Glucuronosyltransferase
2.4.1.22 Lactose Synthase
2.4.1.67 Galactinol--Raffinose Galactosyltransferase
2.4.1.82 Galactinol--Sucrose Galactosyltransferase
2.7.1.1 Hexokinase
2.7.1.101 Tagatose Kinase
2.7.1.11 6-Phosphofructokinase
2.7.1.2 Glucokinase
2.7.1.56 1-Phosphofructokinase
2.7.1.58 2-Dehydro-3-Deoxygalactonokinase

Galactose Metabolism Kit B

2.7.1.6 Galactokinase
2.7.1.69 Protein-N(pai)-Phosphohistidine--Sugar Phosphotransferas
2.7.7.10 UTP--Hexose-1-Phosphate Uridylyltransferase
2.7.7.9 UTP--Glucose-1-Phosphate Uridylyltransferase
3.1.3.9 Glucose-6-Phosphatase
3.2.1.108 Lactase
3.2.1.20 Alpha-Glucosidase
3.2.1.22 Alpha-Galactosidase
3.2.1.23 Beta-Galactosidase
3.2.1.25 Beta-Mannosidase
3.2.1.26 Beta-Fructofuranosidase
3.2.1.85 6-Phospho-Beta-Galactosidase
4.1.2.21 2-Dehydro-3-Deoxyphosphogalactonate Aldolase
4.1.2.40 Tagatose-Bisphosphate aldolase
4.2.1.6 Galactonate Dehydratase
5.1.3.2 UDPglucose 4-Epimerase
5.3.1.26 Galactose-6-Phosphate Isomerase
5.4.2.2 Phosphoglucomutase

Metabolic Kit Catalog

Glutamate Metabolism Kit A

2-Oxoglutarate
2-Oxoglutarate
4-Aminobutanoate
5-Phosphoribosylamine
Carbamoyl-P
Citrate
CO₂
D-Glutamate
Fumarate
Glucosamine-6P
GMP
L-1-Pyrroline 5-Carboxylate
L-Glutamate
L-Glutamine
L-Glutamyl-tRNA(Gln)
L-Glutamyl-tRNA(Gln)
L-Glutamyl-tRNA(Glu)
L-γ-Glutamyl-Cysteine
Malate
N-Acetyl-D-Glucosamine
N-Acetyl-D-Glucosamine-6P
NAD
NH₃
Oxaloacetate
OXID Glutathione
Protein
RED Glutathione
Succinate
Succinate-Semialdehyde
1.2.1.16 Succinate-Semialdehyde Dehydrogenase...
1.2.1.24 Succinate-Semialdehyde Dehydrogenase
1.4.1.2 Glutamate Dehydrogenase
1.4.1.13 Glutamate Synthase (NADPH)
1.4.1.14 Glutamate Synthase (NADH)
1.5.1.12 1-Pyrroline-5-Carboxylate Dehydrogenase
1.6.4.2 Glutathione Reductase (NADPH)
1.8.4 With a Disulfide as Acceptor
1.8.5.1 Glutathione Dehydrogenase (Ascorbate)
2.3.1.4 Glucosamine-Phosphate N-Acetyltransferase
2.4.2.14 Amidophosphoribosyltransferase
2.6.1.1 Aspartate Transaminase
2.6.1.2 Alanine Transaminase
2.6.1.15 Glutamine--Pyruvate Transaminase
2.6.1.16 Glutamine--Fructose-6-Phosphate ...
2.6.1.19 4-Aminobutyrate Transaminase
2.7.1.59 N-Acetylglucosamine Kinase
2.7.2.2 Carbamate Kinase
3.5.1.2 Glutaminase
3.5.1.3 Omega-Amidase
3.5.1.38 Glutamin-(Asparagin)-ase
4.1.1.15 Glutamate Decarboxylase
4.1.1.19 Arginine Decarboxylase
5.1.1.3 Glutamate Racemase
6.1.1.17 Glutamate--tRNA Ligase
6.1.1.18 Glutamine--tRNA Ligase
6.3.1.2 Glutamate--Ammonia Ligase
6.3.2.2 Glutamate--Cysteine Ligase
6.3.2.3 Glutathione Synthase
6.3.4.16 Carbamoyl-Phosphate Synthase(Ammonia)
6.3.5 Carbon--Nitrogen Ligases...

Glutamate Metabolism Kit B

6.3.5.1 NAD⁺ Synthase (Glutamine-Hydrolysing)
6.3.5.2 GMP Synthase(Glutamine-Hydrolysing)
6.3.5.5 Carbamoyl-Phosphate Synthase...

Metabolic Kit Catalog

Glutathione Metabolism Kit

5-Oxoproline
 Acetyl-CoA
 Bis-Y-Glutamylcystine
 Cysteine
 Glutathione(Oxidized)
 Glutathione(Reduced)
 Glycine
 l-Amino Acid
 L-Cysteinyglycine
 L-Glutamate
 L-Y-Glutamylcystine
 L-Y-Glutamylcysteinyl-Glyc.
 L-Y-Glutamyl-L-Amino Acid
 NADP+
 NADPH
 R-S-Alanine
 R-S-Alanyglycine
 R-S-Glutathione
 R-S-Mercapturonate
 RX
 1.1.1.42 Isocitrate Dehydrogenase(NADP+)
 1.1.1.43 Phosphogluconate 2-Dehydrogenase
 1.1.1.49 Glucose-6-Phosphate 1-Dehydrogenase
 1.5.4.1 Pyrimidodiazepine Synthase
 1.6.4.2 Glutathione Reductase(NADPH)
 1.6.4.9 Bis-Gamma-glutamylcystine Reductase(NADPH)
 1.8.3.3 Glutathione Oxidase
 1.8.4.1 Glutathione--Homocystine Transhydrogenase
 1.8.4.2 Protein-Disulfide Reductase(Glutathione)
 1.8.4.3 Glutathione--CoA-Glutathione Transhydrogenase
 1.8.4.4 Glutathione--Cystine Transhydrogenase
 1.8.4.7 Enzyme-Thiol Transhydrogenase(Oxidized-Glutathione)
 1.8.5.1 Glutathione Dehydrogenase(Ascorbate)
 1.11.1.9 Glutathione Peroxidase
 1.11.1.12 Phospholipid-Hydroperoxide Gutathione Peroxidase
 2.3.1.80 Cysteine-S-Conjugate N-Acetyltransferase
 2.3.2.4 Gamma-Glutamylcyclotransferase
 2.5.1.18 Glutathione Transferase
 2.8.1.3 Thiosulfate--Thiol Sulfurtransferase
 3.4.11.4 Tripeptide Aminopeptidase
 3.4.13.6 Cys-Gly Dipeptidase
 2.5.1.78 Glutathionylspermidine Amidase
 3.5.2.9 5-Oxoprolinase (ATP-Hydrolysing)
 6.1.1.8 Deleted Entry
 6.3.2.2 Glutamate--Cysteine Ligase
 6.3.2.3 Glutathione Synthase

Glycerolipid Metabolism Kit A

1,2-Diacyl-Glycerol
 1-Acyl-Glycerone 3-Phosph.
 1-Acyl-Sn-Glycero-3 Phosph.
 1-Acyl-Sn-Glycerol-3P
 1-Alkyl-2-Acet.-Gly.-3-Phos.
 1-Al.-2-Ac.-Gl.-3-Phosphoch.
 1-Alkyl-2-Acetylglycerol
 1-Alkyl-2-Acyl-Gly.-3-Phos.
 1-Alkyl-2-Acylglycerol
 1-Alkyl-Glycero-3-Phosphate
 1-Al.-Gl.-3-Phosp.(Lyso PAF)
 2-Acetyl-Sn-Gly.-3-Phosphog.
 2-Acyl-Sn-Gly.-3-Phosphoch.
 2-Acyl-Sn-Gly.-3-Phosphose.
 2-Hydroxy-Propionaldehyde
 3-Hydroxy-Propanal
 Acetaldehyde
 Acyl-CoA
 Acyl-Monogalac.-Diacylgly.
 Alkyl-Glycerone 3-Phosphate
 Aminoacyl-Phosphatidylgly.
 Cardiolipin
 CDP Choline
 CDP-Diacylglycerol
 CDPethanolamine
 CDPglycerol
 Choline
 D-Alanyl-Lipoteichoic Acid
 D-Glyceraldehyde
 D-Glycerate
 Diacylglycero-3P
 Diethanolamine
 Digalactosyl-Diacylglycerol
 Diglucosyl-Diacylglycerol
 Ethanolamine
 Galactosylglycerol
 Glyceraldehyde-3P
 Glycerate-3P
 Glycero-3-Phospho-Ethan.
 Glycerol
 Glycerol-3P
 Glycerone
 Glycerone-P
 Glycerophospho-Glycogly.
 L-1-Lysophosphatidyl-Eth.
 L-2-Lysophosphatidyl-Eth.
 Lipoteichoic Acid
 Monoacylglycerol
 Monogalactosyl-Diacylgly.
 Monogalactosyl-Monoac.
 Monoglucosyl-Diacylgly.
 O-1-A.-1-E.-2-A.-Gl.-3-Ph.
 O-1-A.-2-Acyl-Gly.-3-Pho.
 O-Acetylcholine
 O-Phosphocholine
 O-Phosphoethanolamine
 Phospatidylch.(Lecithin)
 Phosphatidyl-1D-Myo-I.
 Phosphatidyl-Ethanol.
 Phosphatidylglycerol

Metabolic Kit Catalog

Glycerolipid Metabolism Kit B

Phosphatidyl-Glycerol-P
Phosphatidyl-L-Serine
Propanal
Propane-1,2-Diol
Propane-1,3-Diol
Propane-1-OI
Triacylglycerol(Triglycer.)
Triethanolamine
Trigalactosyl-Diacylglyc.
1.1.1 With NAD+ or NADP+ as Acceptor
1.1.1.1 Alcohol Dehydrogenase
1.1.1.2 Alcohol Dehydrogenase(NADP+)
1.1.1.6 Glycerol Dehydrogenase
1.1.1.8 Glycerol-3-Phosphate Dehydrogenase(NAD+)
1.1.1.21 Aldehyde Reductase
1.1.1.72 Glycerol Dehydrogenase(NADP+)
1.1.1.94 Glycerol-3-Phosphate Dehydrogenase(NAD(P)+)
1.1.1.156 Glycerol 2-Dehydrogenase(NADP+)
1.1.1.202 1,3-Propanediol Dehydrogenase
1.1.99.5 Glycerol-3-Phosphate Dehydrogenase
1.2.1.3 Aldehyde Dehydrogenase(NAD+)
1.14.99.19 Plasmalogen Ethanolamine Desaturase
2.3.1 Acyltransferases
2.3.1.6 Choline O-Acetyltransferase
2.3.1.15 Glycerol-3-Phosphate O-Acyltransferase
2.3.1.20 Diacylglycerol O-Acyltransferase
2.3.1.21 Carnitine O-Palmitoyltransferase
2.3.1.22 2-Acylglycerol O-Acyltransferase
2.3.1.23 1-Acylglycerophosphocholine O-Acyltransferase
2.3.1.42 Glycerol-3-Phosphate O-Acyltransferase
2.3.1.51 1-Acylglycerol-3-Phosphate O-Acyltransferase
2.3.1.62 2-Acylglycerophosphocholine O-Acyltransferase
2.3.1.105 Alkylglycerophosphate 2-O-Acetyltransferase
2.3.1.134 Galactolipid O-Acyltransferase
2.3.1.141 Galactosylacylglycerol O-Acyltransferase
2.3.1.149 Platelet-Activating Factor Acetyltransferase
2.4.1 Hexosyltransferases
2.4.1.46 1,2-Diacylglycerol 3-Beta-Galactosyltransferase
2.5.1.26 Alkylglycerone-Phosphate Synthase
2.7.1.28 Triokinase
2.7.1.29 Glycerone Kinase
2.7.1.30 Glycerol Kinase
2.7.1.31 Glycerate Kinase
2.7.1.32 Choline Kinase
2.7.1.82 Ethanolamine Kinase
2.7.1.94 Acylglycerol Kinase
2.7.1.107 Diacylglycerol Kinase
2.7.7.14 Ethanolamine-Phosphate Cytidylyltransferase
2.7.7.15 Choline-Phosphate Cytidylyltransferase
2.7.7.39 Glycerol-3-Phosphate Cytidylyltransferase
2.7.7.41 Phosphatidate Cytidylyltransferase
2.7.8 Transferases For Other Substituted Phosphate Groups
2.7.8.1 Ethanolaminophosphotransferase
2.7.8.2 Diacylglycerol Cholinephosphotransferase
2.7.8.5 CDPdiacylglycerol--Glycerol-3-Phosphate 3-Phosphatidyltransferase
2.7.8.8 CDPdiacylglycerol--Serine O-Phosphatidyltransferase
2.7.8.11 CDPdiacylglycerol--Inositol 3-Phosphatidyltransferase
2.7.8.20 Phosphatidylglycerol--Membrane-Oligosaccharide Glycerophosphotransferase
3.1.1.3 Triacylglycerol Lipase
3.1.1.4 Prothrombin Lipase A2

Glycerolipid Metabolism Kit C

3.1.1.7 Acetylcholinesterase
3.1.1.23 Acylglycerol Lipase
3.1.1.26 Galactolipase
3.1.1.32 Phospholipase A1
3.1.1.34 Lipoprotein Lipase
3.1.1.47 1-Alkyl-2-Acetyl-glycerophosphocholine Esterase
3.1.3.1 Alkaline Phosphatase
3.1.3.4 Phosphatidate Phosphatase
3.1.3.21 Glycerol-1-Phosphatase
3.1.3.27 Phosphatidylglycerophosphatase
3.1.3.59 Alkylacetyl-glycerophosphatase
3.1.4.2 Glycerophosphocholine Phosphodiesterase
3.1.4.3 Phospholipase C
3.1.4.4 Phospholipase D
3.1.4.46 Glycerophosphodiester Phosphodiesterase
3.2.1.22 Alpha-Galactosidase
3.2.1.23 Beta-Galactosidase
3.3.2.6 Leukotrien-A4 Hydrolase
3.6.1.16 CDPglycerol Pyrophosphatase
3.6.1.26 CDPdiacylglycerol Pyrophosphatase
4.1.1.65 Phosphatidylserine Decarboxylase
4.2.1.28 Propanediol Dehydratase
4.2.1.30 Glycerol Dehydratase
4.3.3 Amine-Lyases
5.3.1.1 Triose-Phosphate Isomerase
6.3.2.4 D-Alanine-D-Alanine Ligase

Metabolic Kit Catalog

Glycoprotein Biosynthesis Kit

(Phosphoglycerly)3-N-Acetyl-B-D-Mannosaminy-1,4-N-Acetyl-D-Glucosaminyldiphosphoundecaprenol
(Phosphoglycerly)n-(Phosphoglycerly)3-N-Acetyl-B-D-Mannosaminy-1,4-N-Acetyl-D-Glucosaminyldiphosphoundecaprenol
(Phosphoglycerlyglycosyl)-(Phosphoglycerly)3-N-Acetyl-B-D-Mannosaminy-1,4-N-Acetyl-D-Glucosaminyldiphosphoundecaprenol
Asn-X-Ser/Thr
Dehydrodolichyl-PP
Dol
GlcB-P-Dol
GlcNAcB1-4GlcNAc-PP-Dol
GlcNAc-PP-Dol
Isopentenyl-PP
ManB1-4GlcNAcB1-4GlcNAc-PP-Dol
ManB-P-Dol
Man-GDP
N-Acetyl-B-D-Mannosaminy-1,4-N-Acetyl-D-Glucosaminyldiphosphoundecaprenol
N-Acetyl-D-Galactosaminyldiphosphoundecaprenol
N-Acetyl-D-Glucosaminyldiphosphoundecaprenol
P-Dol
PP-Dol
2.4.1 Hexosyltransferases
2.4.1.38 Beta-N-Acetylglucosaminyglycopeptide Beta-1,4-Galactosyltransferase
2.4.1.52 Poly(Glycerol-Phosphate) Alpha-Glucosyltransferase
2.4.1.68 Glycoprotein 6-Alpha-L-Fucosyltransferase
2.4.1.83 Dolichyl-Phosphate Beta-D-Mannosyltransferase
2.4.1.101 Alpha-1,3-Mannosyl-Glycoprotein Beta-...
2.4.1.109 Dolichyl-Phosphate-Mannose--Protein Mannosyltransferase
2.4.1.117 Dolichyl-Phosphate Beta-Glucosyltransferase
2.4.1.119 Dolichyl-Diphosphooligosaccharide--Protein Glycosyltransferase
2.4.1.130 Dolichyl-Phosphate-Mannose--Glycolipid Alpha-Mannosyltransferase
2.4.1.131 Glycolipid 2-Alpha-Mannosyltransferase
2.4.1.132 Glycolipid 3-Alpha-Mannosyltransferase
2.4.1.141 N-Acetylglucosaminyldiphosphodolichol ...
2.4.1.143 Alpha-1, 6-Mannosyl-Glycoprotein Beta-1...
2.4.1.144 Beta-1, 4-Mannosyl-Glycoprotein Beta-1...
2.4.1.187 N-Acetylglucosaminyldiphosphoundecaprenol ...
2.4.99.1 Beta-Galactoside Alpha-2,6-Sialyltransferase
2.4.99.6 N-Acetylactosaminide Alpha-2, 3-Sialyltransferase
2.5.1 Transferring Alkyl or Aryl Groups, Other Than Methyl Groups
2.7.1.108 Dolichol Kinase
2.7.8.6 Undecaprenyl-Phosphate Galactosephosphotransferase
2.7.8.12 CDPGlycerol Glycerophosphotransferase
2.7.8.15 UDP-N-Acetylglucosamine....
3.1.3.51 Dolichyl-Phosphatase
3.1.4.48 Dolichyl-Phosphate-Glucose Phosphodiesterase
3.2.1.106 Mannosyl-Oligosaccharide Glucosidase
3.2.1.113 Mannosyl-Oligosaccharide 1,2-Alpha-Mannosidase
3.2.1.130 Glycoprotein Endo-Alpha-1, 2-Mannosidase
3.6.1.43 Dolichyldiphosphatase

Metabolic Kit Catalog

Glyoxylate And Dicarboxylate Metabolism Kit A

(S)-Malate
 10-Formyl-THF
 2-Hydroxy-3-Oxoadipate
 2-Oxoglutarate
 3-Ethylmalate
 3-Oxalomalate
 3-Phospho-D-Glycerate
 3-Propylmalate
 4-Hydroxy-2,-Oxoglutarate
 5,10-Methenyl-THF
 5,10-Methylene-THF
 Acetyl-CoA
 Butyryl-CoA
 Cis-Aconitate
 Citrate
 CO₂
 D-Glycerate
 Dihydroxy-Fumarate
 D-Ribulose-1,5P₂
 Ethane-1,2-Diol
 Formate
 Formyl Phosphate
 Formyl-CoA
 Glycolaldehyde
 Glycolate
 Glyoxylate
 H⁺
 H₂
 Hydroxypyruvate
 Isocitrate
 L-Malyl-CoA
 L-Tartrate
 Me₃o-Tartrate
 N-Formyl Derivatives
 Oxalate
 Oxaloacetate
 Oxaloglycolate
 Oxalyl-CoA
 Pentanoyl-CoA
 Phosphoglycolate
 pyruvate
 Succinate
 Tartronate Semialdehyde
 Trans-2,3-Epoxysuccinate
 1.1.1.26 Glyoxylate Reductase
 1.1.1.29 Glycerate Dehydrogenase
 1.1.1.37 Malate Dehydrogenase
 1.1.1.60 2-Hydroxy-3-Oxopropionate Reductase
 1.1.1.77 Lactaldehyde Reductase
 1.1.1.79 Glyoxylate Reductase (NADP⁺)
 1.1.1.81 Hydroxypyruvate Reductase
 1.1.1.92 Oxaloglycolate Reductase (Decarboxylating)
 1.1.1.93 Tartrate Dehydrogenase
 1.1.3.15 (S)-2-Hydroxy-Acid Oxidase
 1.1.99.14 Glycolate Dehydrogenase
 1.12.1.2 Hydrogen Dehydrogenase
 1.18.99.1 Hydrogenase
 1.2.1.17 Glyoxylate Dehydrogenase (Acylation)
 1.2.1.2 Formate Dehydrogenase
 1.2.1.21 Glycolaldehyde Dehydrogenase

Glyoxylate And Dicarboxylate Metabolism Kit B

1.2.2.1 Formate Dehydrogenase (Cytochrome)
 1.2.3.4 Oxalate Oxidase
 1.2.3.5 Glyoxylate Oxidase
 1.3.1.7 Meso-Tartrate Dehydrogenase
 1.5.1.5 Methylene tetrahydrofolate Dehydrogenase(NADP⁺)
 2.7.1.31 Glycerate Kinase
 2.7.2.6 Formate Kinase
 2.8.3.2 Oxalate CoATransferase;
 3.1.2.10 Formyl-CoA Hydrolase
 3.1.3.18 Phosphoglycolate Phosphatase
 3.3.2.4 Trans-Epoxysuccinate Hydrolase
 3.5.1.10 Formyltetrahydrofolate Deformylase
 3.5.1.27 N-Formylmethionylaminoacyl-TRNA Deformylase
 3.5.1.31 Formylmethionine Deformylase
 3.5.1.49 Formamidase
 3.5.1.56 N,N-Dimethylformamidase
 3.5.1.68 N-Formylglutamate Deformylase
 3.5.1.8 Formylaspartate Deformylase
 3.5.1.9 Arylformamidase
 3.5.4.9 Methenyltetrahydrofolate Cyclohydrolase
 4.1.1.2 Oxalate Decarboxylase
 4.1.1.39 Ribulose-Bisphosphate Carboxylase
 4.1.1.40 Hydroxypyruvate Decarboxylase
 4.1.1.47 Tartronate-Semialdehyde Synthase
 4.1.1.54 Dihydroxyfumarate Decarboxylase
 4.1.1.8 Oxalyl-CoA Decarboxylase
 4.1.3.1 Isocitrate Lyase
 4.1.3.10 3-Ethylmalate Synthase
 4.1.3.11 3-Propylmalate Synthase
 4.1.3.13 Oxalomalate Lyase
 4.1.3.15 2-Hydroxy-3-Oxoadipate Synthase
 4.1.3.16 4-Hydroxy-2-Oxoglutarate Aldolase
 4.1.3.2 Malate Synthase
 4.1.3.24 Malyl-CoA Lyase
 4.1.3.7 Citrate (Si)-Synthase
 4.2.1.3 Aconitate Hydratase
 4.2.1.32 L(+)-Tartrate Dehydratase
 5.1.2.5 Tartrate Epimerase
 6.2.1.8 Oxalate--CoA Ligase
 6.2.1.9 Malate--CoA Ligase
 6.3.4.3 Formate--Tetrahydrofolate Ligase

Metabolic Kit Catalog

Glycolysis-Gluconeogenesis Kit

2-Hydroxy-Ethyl-ThPP
 6-S-Acetyl-Dihydrolyipoamide
 Acetaldehyde
 Acetyl-CoA
 Arbutin(Extrace Llular)
 Arbutin-6P
 B-D-Fructose-16P2
 B-D-Fructose-6P
 B-D-Glucose
 B-D-Glucose-6P
 Cyclic Glycerate-2,3P2
 D-Glucose
 D-Glucose 6-Sulfate
 D-Glucose(Extrace Llular)
 D-Glucose-1P
 D-Glucose-6P(Aerobic Decarboxylation)
 Dihydrolyipoamide
 Ethanol
 Glyceraldehyde-3P
 Glycerate-1,3P2
 Glycerate-2,3P2
 Glycerate-2P
 Glycerate-3P
 Glycerone-P
 Lipoamide
 OL-Lactate
 Phosphoenolpyruvate
 Photosynthesis
 Pyruvate
 Salicin (Extrace Llular)
 Salicin-6P
 ThPP
 1.1.1.1 Alcohol Dehydrogenase
 1.1.1.2 Alcohol Dehydrogenase(NADP+)
 1.1.1.27 L-Lactate Dehydrogenase: Lactic Acid Dehydrogenase
 1.1.1.71 Alcohol Dehydrogenase (NAD(P)+)
 1.1.99.8 Alcohol Dehydrogenase (Acceptor)
 1.2.1.12 Glyceraldehyde-3-Phosphate Dehydrogenase (Phosphorylating);
 1.2.1.3 Aldehyde Dehydrogenase (NAD+)
 1.2.1.5 Aldehyde Dehydrogenase (NDA(P)+)
 1.2.1.51 Pyruvate Dehydrogenase (NADP+)
 1.2.4.1 Pyruvate Dehydrogenase (Lipoamide)
 1.8 .1.4 Dihydrolyipoamide Dehydrogenase
 2.3.1.12 DihydrolyipoAmide S-Acetyltransferase
 2.7.1 .1 Hexokinase
 2.7.1.11 6-Phosphofructokinase
 2.7.1.2 Glucokinase
 2.7.1.40 Pyruvate Kinase
 2.7.1.41 Glucose-1-Phosphate Phosphodismutase
 2.7.1.63 Polyphosphate--Glucose Phosphotransferase
 2.7.1.69 Protein-N(Pai)-Phosphohistidine..
 2.7.2.3 Phosphoglycerate Kinase
 2.7.2 Phosphotransferases...
 3.1.3.10 Glucose-1-Phosphatase
 3.1.3.11 Fructose-Bisphosphatase

Glycine, Serine And Threonine Metab. Kit A

(3-Phosphatidyl)-Ethanolamine
 2-Amino-3-Oxoadipate
 2-Oxobutanoate
 3P-D-Glycerate
 3P-Hydroxy-Pyruvate
 5,10-Methylene-THF
 5-Aminolevulinate
 Aminoacetone
 Aminopropan-2-Ol
 Betaine
 Betaine Aldehyde
 Choline
 Co2
 Creatine
 Cystathionine
 Cysteine
 D-1,2-Diacyl-Glycerol
 Dihydro-Lipoylprotein
 Dimethylglycine
 D-Serine
 Glycerate
 Glycine
 Glycyl-tRNA(Gly)
 Glyoxylate
 Guanidinoacetate
 Homoserine
 Hydroxyacetone
 Hydroxy-Pyruvate
 L-2-Amino-Acetoacetate
 L-4-Aspartylphosphate
 L-Allothreonine
 L-Aspartate
 L-Aspartate 4-Semialdehyde
 Lecithin
 Lipoylprotein
 Lombricine
 L-Seryl-tRNA(Ser)
 L-Threonyl-tRNA(Thr)
 Methylglyoxal
 NH3
 N-Phospho-Lombricine
 O-Phosphatidyl-L-Serine
 O-Phospho-Ethanolamine
 O-Phospho-L-Homoserine
 Phosphatidyl-N-Dimethylethanolamine
 Phosphatidyl-N-Methylethanolamine
 Phosphoserine
 Pyruvate
 S-Amino-Methyldihydro-Lipoylprotein
 Sarcosine
 Serine
 THF
 Threonine
 1.1.1 With NAD+ OR NADP+ as Acceptor
 1.1.1.3 Homoserine Dehydrogenase
 1.1.1.75 @-Aminopropanol Dehydrogenase
 1.1.1.81 Hydroxypruvate Reductase
 1.1.1.95 Phosphoglycerate Dehydrogenase
 1.1.1.103 L-Threonine 3-Dehydrogenase
 1.1.1.129 L-Threonate 3-Dehydrogenase

Metabolic Kit Catalog

Glycine, Serine And Threonine Metabolism Kit B

1.1.3.17 Choline Oxidase
 1.1.99.1 Choline Dehydrogenase
 1.2.1.8 Betaine-Aldehyde Dehydrogenase
 1.2.1.11 Aspartate-Semialdehyde Dehydrogenase
 1.4.2.1 Glycine Dehydrogenase (Cytochrome)
 1.4.3.3 D-Amino-Acid Oxidase
 1.4.3.4 Amino Oxidase (Flavin-Containing)
 1.4.3.6 Amino Oxidase(Copper-containing)
 1.4.4.2 Glycine Dehydrogenase(Decarboxylating)
 1.5.3.1 Sarcosine Oxidase
 1.5.99.1 Sarcoine Dehydrogenase
 1.5.99.2 Dimethylglycine Dehydrogenase
 1.8.1.4 Dihydroipoamide Dehydrogenase
 2.1.1.2 Guanidinacetate N-Methyltransferase
 2.1.1.5 Betaine--Homocysteine S-Methyltransferase
 2.1.1.17 Phophatidylethanolamine N-Methyltransferase
 2.1.1.20 Glycine N-Methyltransferase
 2.1.1.71 Phosphatidyl-N-Methylethanolamine N-Methyltransferase
 2.1.2 Hydroxymethyl-, Formyl- and Related Transferases
 2.1.2.1 Glycine Hydroxymethyltransferase
 2.1.2.10 Aminomethyltransferase
 2.1.4.1 Glycine Amidinotransferase
 2.3.1.29 Glycine C-Acetyltransferase
 2.3.1.37 5-Aminolevulinate Synthase
 2.6.1.4 Glylcine Transaminase
 2.6.1.44 Alanine--Glyoxylate Transaminase
 2.6.1.45 Serine--Glyoxylate Transaminase
 2.6.1.51 Serine--Pyruvate Transaminase
 2.6.1.52 Phosphoserine Transaminase
 2.7.1.31 Glycerate Kinase
 2.7.1.39 Homoserine Kinase
 2.7.2.4 Aspartate Kinase
 2.7.3.5 Lombricine Kinase
 2.7.8.8 CDPdiacylglycerol--Serine O-Phosphatidyltransferase
 3.1.3.3 Phopshoserine Phosphatase
 3.1.3.38 3-Phosphoglycerate Phosphatase
 3.1.4.3 Phospholipase C
 4.1.1.65 Phosphatidylserine Decarboxylase
 4.1.2.5 Threonine Aldolase
 4.2.1.13 L-Serine Dehydratase
 4.2.1.14 D-Serine Dehydratase
 4.2.1.16 Threonine Dehydratase
 4.2.1.22 Cystathionine Beta-Synthase
 4.2.99.2 Threonine Synthase
 4.2.99.9 O-succinylhomoserine (Thiol)-Lyase
 5.1.1.10 Amino-Acid Racemase
 6.1.1.3 Threonine--tRNA Ligase
 6.1.1.11 Serine--tRNA Ligase

Histidine Metabolism Kit A

(1-Ribosylimidazole)-4-Acetate
 1-(5-Phosphoribosyl)Imidazole-4-Acetate
 1-Methyl-L-Histidine
 2-Oxoglutarate
 3-Methylimidazole Acetaldehyde
 3-Methylimidazole-Acetic Acide
 4-(B-Acetylaminoethyl)-Imidazole
 4-Imidazolone-5-Propanoate
 4-Oxoglutaramate
 5'P-D-1-Ribulosyl-Formimine
 5'P-Ribosyl-5-Amino-4-Imidazole Carboxamide(AICAR)
 Anserine
 Aspartate
 Carnosine
 Ergothioneine
 Formyl-Isoglutamate
 Hercynine
 Histamine
 Hydantoin-5-Propionate
 Imidazole Acetaldehyde
 Imidazole-4-Acetate
 Imidazole-Acetol-P
 Imidazole-Glycerol-3P
 Imidazole-Lactate
 Imidazole-Pyruvate
 Imidazolone Acetate
 Isoglutamate
 L-glutamate
 L-Histadyl-+RNA
 L-Histidinal
 L-Histidine
 L-Histidinol
 L-Histidinol-P
 N-Carbamyl-L-Glutamate
 N-Formimino-L-Aspartate
 N-Formimino-L-Glutamate
 N-Formly-L-Aspartate
 N-Formyl-L-Glutamate
 N-Methyl-Histamine
 Phosphoribosyl-AMP
 Phosphoribosyl-ATP
 Phosphoribosyl-Formimino-AICAR-P
 Phosphoribulosyl-Formimino-AICAR-P
 PRPP
 Thiourocanic Acid
 Urocanate
 1.1.1.23 Histidinol Dehydrogenase
 12.1.3 Aldehyde Dehydrogenase (NAD+)
 1.2.1.5 Aldehyde Dehydrogenase (NAD(P)+)
 1.4.3.4 Amine Oxidase (Flavine-Containing)
 1.4.3.6 Amine Oxidase (Copper-Containing)
 1.14.13 With NADH or NADPH as One Donor
 1.14.13.5 Imidazoleacetate 4-Monooxygenase
 2.1.1 Methyltransferases
 2.1.1.18 Polysaccharide O-Methyltransferase
 2.1.1.22 Carnosine N-Methyltransferase
 2.1.2.5 Glutamate Formiminotransferase
 2.3.1 Acyltransferases
 2.4.2 Pentosyltransferases
 2.4.2.17 ATP Phosphoribosyltransferase

Metabolic Kit Catalog

Histidine Metabolism Kit B

2.6.1 Transaminases
 2.6.1.9 Histidinol-Phosphate Transaminase
 2.6.1.38 Histidine Transaminase
 3.1.3.15 Histidinol-Phosphatase
 3.4.13.3 X-His Dipeptidase
 3.4.13.5 X-Methyl-His Dipeptidase
 3.4.13.20 Beta-Ala-His Dipeptidase
 3.5.1 In Linear Amides
 3.5.1.15 Aspartoacylase
 3.5.1.18 Succinyl-Diaminopimelate Desuccinylase
 3.5.1.68 N-Formylglutamate Deformylase
 3.5.2 In Cyclic Amides
 3.5.2.7 Imidazolonepropionase
 3.5.3.5 Formiminoaspartate Deiminase
 3.5.3.8 Formiminoglutamase
 3.5.3.13 Formiminoglutamate Deiminase
 3.5.4.19 Phosphoribosyl-AMP Cyclohydrolase
 3.6.1.31 Phosphoribosyl-ATP Pyrophosphatase
 4.1.1.21 Phosphoribosylaminoimidazole Carboxylase
 4.1.1.28 Aromatic-L-Amino-Acid Decarboxylase
 4.2.1.19 Imidazoleglycerol-Phosphate Dehydratase
 4.2.1.49 Urocanat Hydratase
 4.3.1.3 Histidine Ammonia-Lyase
 5.3.1.16 N-(5'-Phospho-D-Ribosylformimino)....
 6.1.1.21 Histidine--tRNA Ligase
 6.3.2.11 Carnosine Synthase
 6.3.4.8 Imidazoleacetate--Phosphoribosyldiphosphate Ligase

Inositol Phosphate Metabolism Kit

D-Myo-Inositol-4,5P2
 1,2-Diacylglycerol
 1D-1-O-Methyl-Myo-Inositol
 1D-3-O-Methyl-Myo-Inositol
 1D-Myo-Inositol
 1D-Myo-Inositol-1,3,4,5,6P5
 1D-Myo-Inositol-1,3,4,5P4
 1D-Myo-Inositol-1,3,4,6P4
 1D-Myo-Inositol-1,3,4P3
 1D-Myo-Inositol-1,3P2
 1D-Myo-Inositol-1,4,5P3
 1D-Myo-Inositol-1,4P2
 1D-Myo-Inositol-1P
 1D-Myo-Inositol-3,4P2
 1D-Myo-Inositol-3P
 1D-Myo-Inositol-4P
 1-Phosph-1D-Myo-Inositol-3P
 1-Phosph-1D-Myo-Ino-4,5-Bis
 1-Phosph-1D-Myo-Inositol-4P
 2,4,6/3,5-Pentahydroxy-Cyclo
 3,5/4-Trihy-Cyclo-1,2-Dione
 D-Glucose-6P
 D-Glucuronate
 ID-Myo-Inositol-3,4,5,6P4
 Inositol-1,2,3,4,5P5
 Inositol-1,2,4,5,6P5
 Myo-Inositol-P6
 Phosph-1D-Myo-Inositol
 Phosph-3,4,5-Trisposphate
 1.1.1.18
 1.13.99.1
 2.1.1.39
 2.1.1.40
 2.7.1
 2.7.1.64
 2.7.1.67
 2.7.1.68
 2.7.1.127
 2.7.1.133
 2.7.1.134
 2.7.1.137
 2.7.1.140
 3.1.3.8
 3.1.3.25
 3.1.3.56
 3.1.3.57
 3.1.3.61
 3.1.3.62
 3.1.3.64
 3.1.3.65
 3.1.3.66
 3.1.4.3
 3.1.4.10
 3.1.4.11
 4.1.2.44
 5.5.1.4

Lysine Biosynthesis Kit

2,3,4,5-Tetrahydro-dipicolinate
 2,3-Dihydrodipicolinate
 2,5-Diamino-Hexanoate
 2,6-Diaminopimelate
 2-Amino-3-Oxohexanoate
 2-Oxo-6-Amino-Caproate
 2-Oxo adipate
 2-Oxo-Glutarate
 5-Adenyl-2-Amino adipate
 5-Adenyl-2-Amino-Adppatesemialdehyde
 Acetyl-CoA
 D-Lysine
 Homo-Cis-Aconitate
 Homocitrate
 Homo-Isocitrate
 L-2-Amino-6-Oxopimelate
 L-2-Amino adipate
 L-2-Amino adipate 6-Semialdehyde
 L-4-Aspartylphosphate
 L-Aspartate
 L-Aspartate 4-Semialdehyde
 L-Homoserine
 L-Lysine
 L-Lys-tRNA(Lys)
 L-Saccharopine
 Meso-2,6-Diaminopimelate
 N6-Acetyl-LL-2,6-Diaminopimelate
 N-Acetyl-L-2-Amino-6-Oxopimelate
 N-Succinyl-2-Amino-6-Oxopimelate
 N-Succinyl-L-2,6-Diaminopimelate
 Oxaloglutarate
 UDP-N-Acetylmuramoyl-L-Alanyl-D-Glutamyl....
 UDP-N-Acetylmuramoyl-L-Alanyl-D-Glutamyl....

Metabolic Kit Catalog

Lysine Degradation Kit A

(S)-3-Hydroxy-Butanoyl-CoA
2-Oxo-6-Acet-Amidocaproate
2-Oxo-6-Aminocaproate
2-Oxoadipate
3,5-Diamino-Caprorate
3-Dehydroxy-Carnitine
4-Trimethyl-ammonibutanol
4-Trimethyl-Ammonibutanoate
5-Acetamidopentanoate
5-Amino Pentanoate
5-Amino-3-Oxohexanoate
5-Amino-Pentanamide
5-Galactosyloxy-Lysine
5-Phosphonoxy-Lysine
6-Acetamido-2-Oxohexanoate
Acetoacetyl-CoA
Acetyl-CoA
Aerobactin
Cadaverine
Carnitine
Carotonoyl-CoA
Deltal-Pieprideine-2-Carboxylate
Deta6-Piperideine-2-L-Carboxylate
D-Lysine
Erythro-5-Hydroxylysine
Glutarate
Glutarate Semialdehyde
Glutaryl-CoA
Glycine
L-2-Amino-Adipate
L-2-Amino adipate 6-Semialdehyde
L-B-Lysine
L-Lysine
L-Pipecolate
N2-(D-1-Carboxyethyl)-L-Lysine
N6-Acetyl-N6-Hydroxy-Lysine
N6-Hydroxy-Lysine
N6-Hydroxy-Trimethyl-Lysine
N-Acetyllysine
Protein-Lysine
Protein-N,N-Me2-Lysine
Protein-N6-Me-Lysine
Protein-N-Trimethyl-Lysine
Saccharopine
S-Glutaryl-Dihydrolipoamide
Trimethyl-Lysine
1.1.1 With NAD+ or NADP+ As Acceptor
1.1.1.35 3-Hydroxyacyl-CoA Dehydrogenase
1.2.1.3 Aldehyde Dehydrogenase (NAD+)
1.2.1.20 Glutarate-Semialdehyde Dehydrogenase
1.2.1.31 L-Amino adipate-Semialdehyde Dehydrogenase...
1.2.1.47 4-Trimethylammonibutyraldehyde Dehydrogenase
1.2.4.2 Oxoglutarate Dehydrogenase (Lipoamide)
1.3.99.7 Glutaryl-CoA Dehydrogenase
1.4.1.11 L-Erythro-3,5-Ldiaminohexanoate Dehydrogenase
1.4.3.14 L-Lysine Oxidase
1.5.1.7 Saccharopine Dehydrogenase (NAD+, L-Lysine Forming)
1.5.1.9 Saccharopine Dehydrogenase(NAD+, L-Glutamate Forming)
1.5.1.16 D-Lysopine Dehydrogenase

Lysine Degradation Kit B

1.5.1.21 Deltal-Piperideine-2-Carboxylate Reductase
1.5.3.7 L-Pipecolaste Oxidase
1.5.99.3 L-Pipecolate Dehydrogenase
1.13.12.2 Lysine 2-Monooxygenase
1.13.12.10 Lysine 6-Monooxygenase
1.14.11.1 Gamma-Butyrobetaine Dioxygenase
1.14.11.4 Procollagen-Lysien 5-Dioxygenase
1.14.11.8 Trimethyllysine Dioxygenase
2.1.1.43 Histone-Lysine N-Methyltransferase
2.1.1.59 Cytochrome-C-Lysine N-Methyltransferase
2.1.1.60 Calmodulin-Lysine N-Methyltransferase
2.1.2.1 Glycine Hdroxymethyltransferase
2.3.1. Acyltransferases
2.3.1.9 Acetyl-CoA C-Acetyltransferase
2.3.1.32 Lysine N-Acetyltransferase
2.3.1.61 Dihydrolipoamide S-Succinyltransferase
2.3.1.102 N6-Hydroxylysine O-Acetyltransferase
2.4.1.50 Procollagen Galactosyltransferase
2.6.1.39 2-Amino adipate Transaminase
2.6.1.48 5-Aminovalerate Transaminase
2.6.1.65 N6-Acetyl-Beta-Lysine Transaminase
3.4 Acting on Peptide Bonds (Peptidases)
3.5.1.17 Acyl-Lysine Deacylase
3.5.1.30 5-Aminopentanamidase
3.5.1.63 4-Acetamidobutyrate Deacetylase
4.1.1.18 Lysine Decarboxylase
4.1.2 Aldehyde-Lyases
4.2.1.17 Enoyl-CoA Hydratase
5.1.1.5 Lysine Racemase
5.4.3.2 Lysine 2, 3-Aminomutase
5.4.3.3 Beta-Lysine 5, 6-Aminomutase
6 Ligases
6.2.1.6 Glutarate--CoA Ligase

Metabolic Kit Catalog

Methane Metabolism Kit

3-Oxo-Hexulose-6P
 5,10-Methylene-Tetrahydrofolate
 5-Methyl-Tetrahydrofolate
 Acetyl-CoA
 Co2
 Corrinoid
 D-Fructose-6P
 D-Glycer-Aldehyde-3P
 Dimethylamine
 D-Ribulose-5P
 D-Xylulose-5P
 Formaldehyde
 Formate
 Glycerone
 Glycine
 H+
 H2
 Methane
 Methanol
 Methylamine
 Methyl-Corrinoid
 N-Methyl-L-Glutamate
 Serine
 S-Formyl-Glutathione
 Trimethylamine
 Trimethylamine N-Oxide
 1.1.1.224 Mannose-6-Phosphate 6-Reductase
 1.1.3.13 Alcohol Oxidase
 1.1.99.8 Alcohol Dehydrogenase (Acceptor)
 1.2.1.1 Formaldehyde Dehydrogenase....
 1.2.1.2 Formate Dehydrogenase
 1.2.1.43 Formate Dehydrogenase (NADP+)
 1.2.99.2 Carbon Monoxide Dehydrogenase
 1.4.99.3 Amine Dehydrogenase
 1.5.99.5 Methylglutamate Dehydrogenase
 1.5.99.7 Trimethylamine Dehydrogenase
 1.5.99.10 Dimethylamine Dehydrogenase
 1.6.6.9 Trimethylamine-N-Oxide Reductase
 1.7.99.5 5,10-Methylenetetrahydrofolate Reductase...
 1.11.1.6 Catalase
 1.11.1.7 Peroxidase
 1.12.1.2 Hydrogen Dehydrogenase
 1.14.13 With NADH or NADPH as One Donor.....
 1.14.13.25 Methane Monooxygenase
 1.18.99.1 Hydrogenase
 2.1.1.21 Methylamine--Glutamate
 2.1.2.1 Glycine Hydroxymethyltransferase
 2.2.1.3 Formaldehyde Transketolase
 3.1.2.12 S-Formylglutathione Hydrolase
 4.1.2.9 Phosphoketolase
 4.1.2.32 Trimethylamine-Oxide Aldolase

Methionine Metabolism Kit

2-Oxobutanoate
 4-Methylthio-2-Oxobutanoate
 Aminoacyl-L-Methionine
 Cystathionine
 D-Ribose
 Homocystine
 Homoserine
 L-Cysteine
 L-Homocysteine
 L-Methionine
 L-Methionine-S-Oxide
 L-Methionyl-tRNA
 L-Serine
 N-Formyl-L-Methionine
 N-Formylmethionyl-tRNA
 O-Acetyl-L-Homoserine
 O-Succinyl-L-Homoserine
 S-Adenosyl-L-Homocysteine
 S-Adenosyl-L-Methionine
 S-D-Ribosyl-L-Homocysteine
 1.4.3.2 L-Amino-Acid Oxidase
 1.8.4.1 Glutathione--Homocystine Transhydrogenase
 1.8.4.5 Methionine-S-Oxide Reductase
 2.1.1.5 Betaine--Homocysteine S-Methyltransferase
 2.1.1.10 Homocysteine S-Methyltransferase
 2.1.1.13 5-Methyltetrahydrofolate.....
 2.1.1.14 5-Methyltetrahydropteroyltriglutamate....
 2.1.1.37 DNA (Cytosine-5-)-Methyltransferase
 2.1.2.9 Methionyl-tRNA Formyltransferase
 2.3.1.31 Homoserine O-Acetyltransferase
 2.3.1.46 Homoserine O-Succinyltransferase
 2.5.1.6 Methionine Adenosyltransferase
 3.2.2.9 Adenosylhomocysteine Nucleosidase
 3.3.1.1 Adenosylhomocysteinase
 3.3.1.3 Ribosylhomocysteinase
 3.4.13.12 Met-X Dipeptidase
 3.5.1.31 Formylmethionine Deformylase
 3.6.1.25 Triphosphatase
 4.2.1.22 Cystathionine Beta-Synthase
 4.2.99.9 O-Succinylhomoserine(Thiol)-Lyase
 4.2.99.10 O-Acetylhomoserine (Thiol)-Lyase
 4.4.1.1 Cystathionine Gamma-Lyase
 4.4.1.8 Cystathionine Beta-Lyase
 6.1.1.10 Methionine--tRNA Ligase

Metabolic Kit Catalog

Nicotinate And Nicotinamide Metabolism Kit

NADP+ And NAD+ Mix
2,5-Dihydroxy-Pyridine
6-Hydroxy-Nicotinate
Deamido-NAD+
Fumarate
Glycerone-P
Iminoaspartate
L-Aspartate
Maleamate
Maleate
N1-Methyl-2-Pyridone-5-Carboxamide
N1-Methyl-4-Pyridone-5-Carboxamide
N1-Methyl-Nicotinamide
Nicotinamide
Nicotinamide D-Ribonucleotide
Nicotinate
Nicotinate D-Ribonucleoside
Nicotinate D-Ribonucleotide
Nicotinurate
N-Ribosyl-Nicotinamide
Quinolate
Trigonelline
1.2.3.1 Aldehyde Oxidase
1.5.1.13 Nicotinate Dehydrogenase
1.6.1.1 NAD(P)+ Transhydrogenase (B-Specific)
1.6.1.2 NAD(P)+ Transhydrogenase(AB-Specific)
1.13.11.9 2,5-Dihydroxypyridine 5,6-Dioxygenase
1.14.99.26 2-Hydroxypyridine 5-Monooxygenase
2.1.1.1 Nicotinamide N-Methyltransferase
2.1.1.7 Nicotinate N-Methyltransferase
2.4.2.1 Purine-Nucleoside Phosphorylase
2.4.2.11 Nicotinate Phosphoribosyltransferase
2.4.2.12 Nicotinamide Phosphoribosyltransferase
2.4.2.219 Nicotinate-Nucleotide Pyrophosphorylase(Carboxylating)
2.7.1 Phosphotransferases With An Alcohol Group As Acceptor
2.7.1.22 Ribosylnicotinamide Kinase
2.7.1.23 NAD+ Kinase
2.7.7.1 Nicotinamide-Nucleotide Adenylyltransferase
2.7.7.18 Nicotinate-Nucleotide Aldenylyltransferase
3.1.3 Phosphoric Monoester Hydrolases
3.1.3.5 5'-Nucleotidase
3.2.2.1 Purine Nucleosidase
3.2.2.5 NAD+ Nucleosidase
3.2.2.6 NAD(P)+ Nucleosidase
3.2.2.14 NMN Nucleosidase
3.5.1 In Linear Amides
3.5.1.19 Nicotinamidase
3.5.1.42 Nicotinamide-Nucleotide Amidase
3.5.4.25 GTP Cyclohydrolase II
3.5.4.26 Diaminohydroxyphosphoribosylaminopyrimidine...
3.6.1.9 Nucleotide Pyrophosphatase
3.6.1.22 NAD+ Pyrophosphatase
4.1.99 Other Carbon-Carbon Lyases
5.2.1.1 Maleate Isomerase
6.3.1.5 NAD+ Synthase
6.3.5.1 NAD+ Synthase(Glutamine-Hydrolysing)

Nitorobenzene Degradation Kit

1,2-Dihydroxy Naphthalene
2-Aminomuconic Semialdehyde
2-Aminophenol
2-Hydroxychromene-2-Carboxylate
2-Hydroxymuconic Semialdehyde
4-Hydroxy-2-Oxovalerate
Benzene
Beta-1,2,3,4,5,6-Hexachlore Cyclohexane
Catechol
Chlorobenzene
Cis,Cis-Muconate
Cis-1,2-Dihydroxy-1,2-Dihydronaphthalene
Cis-2-Hydroxy-Penta-2,4-Dienoate
Cis-Dihydrobenzenediol
Delta-3,4,5,6-Tetrachloro Cyclohexene
Hydroxylaminobenzene
Naphthalene
Nitrobenzene
Nitrosabenzene
Phenol
Pyruvate
Salicylaldehyde
Salicylate
Trans-O-Hydroxy Benzylidenepyruvate
1.3.1.19 Cis-1,2-Dihydrobenzene-1,2-Diol Dehydrogenase
1.3.1.29 Cis-1,2-Dihydro-1,2-Dihydroxynaphthalene Dehydrogenase
1.13.11.1 Catechol 1,2-Dioxygenase
1.13.11.2 Catechol 2,3-Dioxygenase
1.14.12.3 Benzene 1,2-Dioxygenase
1.14.12.12 Naphthalene 1,2-Dioxygenase
1.14.13.1 Salicylate 1-Monooxygenase
1.14.13.7 Phenol 2-Monooxygenase
3.7.1.9 2-Hydroxymuconate-Semialdehyde Hydrolase
4.1.2 Aldehyde-Lyases
4.2.1.80 2-Oxopent-4-Enoate Hydratase

Metabolic Kit Catalog

Nitrogen Metabolism Kit A

Formamide
 Formate
 Nitrite
 Hydroxylamine
 Nitroalkane
 Nitrate
 Ammonia
 Nitric Oxide
 Dinitrogen Oxide
 Nitrogen
 H₂CO₃
 CO₂
 Carbamate
 Cyanate
 Carbamoyl-P
 L-Aspartate
 L-Asparagine
 Nitrogenous Compounds(Amino Acids)
 L-Glutamine
 L-Glutamate
 Amines
 Amides
 Cyclic Amidines
 Amidines
 Nitriles
 1.4.1 With NAD⁺ or NADP⁺ as Acceptor
 1.4.1.2 Glutamate Dehydrogenase
 1.4.1.3 Glutamate Dehydrogenase (NAD(P)⁺)
 1.4.1.4 Glutamate Dehydrogenase (NADP⁺)
 1.4.1.13 Glutamate Synthase (NADPH)
 1.4.1.14 Glutamate Synthase (NADH)
 1.4.3 With Oxygen as Acceptor
 1.4.7.1 Glutamate Synthase (Ferredoxin)
 1.4.99.1 D-Amino-Acid Dehydrogenase
 1.4.99.2 Taurine Dehydrogenase
 1.6.2 With a Heme Protein as Acceptor
 1.6.6.1 Nitrate Reductase (NADH)
 1.6.6.2 Nitrate Reductase (NAD(P)H)
 1.6.6.3 Nitrate Reductase (NADPH)
 1.6.6.4 Nitrite Reductase (NAD(P)H)
 1.6.6.11 Hydroxylamine Reductase (NADH)
 1.7.2.1 Nitrite Reductase (Cytochrome)
 1.7.3.1 Nitroethane Oxidase
 1.7.3.4 Hydroxylamine Oxidase
 1.7.7.1 Ferredoxin--Nitrite Reductase
 1.7.7.2 Ferredoxin--Nitrate Reductase
 1.7.99.1 Hydroxylamine Reductase
 1.7.99.3 Nitrite Reductase
 1.7.99.4 Nitrate Reductase
 1.7.99.6 Nitrous-Oxide Reductase
 1.7.99.7 Nitric-Oxide Reductase
 1.9.3.2 Pseudomonas Cytochrome Oxidase
 1.9.6.1 Nitrate Reductase (Cytochrome)
 1.13.11.32 2-Nitropropane Dioxygenase
 1.13.12 With Incorporation of One Atom of Oxygen
 1.14.12.1 Anthranilate 1,2-Dioxygenase....
 1.14.13.35 Anthranilate 3-Monooxygenase
 1.18.6.1 Nitrogenase
 1.19.6.1 Nitrogenase (Flavodoxin)
 2.1.2.10 Aminomethyltransferase

Nitrogen Metabolism Kit B

2.6.1 Transaminases
 2.7.2.2 Carbamate Kinase
 3.5.1 In Linear Amides
 3.5.1.1 Asparaginase
 3.5.1.2 Glutaminase
 3.5.1.35 D-Glutaminase
 3.5.1.38 Glutamin-(Asparagin)-Ase
 3.5.1.49 Formamidase
 3.5.3 In Linear Amidines
 3.5.4 In Cyclic Amidines
 3.5.5.1 Nitrilase
 3.5.5.2 Ricinine Nitrilase
 4.1.99.1 Tryptophanase
 4.1.99.2 Tyrosine Phenol-Lyase
 4.2.1 Hydro-Lyases
 4.2.1.1 Carbonate Dehydratase
 4.3.1 Ammonia-Lyases
 4.3.1.1 Aspartate Ammonia-Lyase
 4.3.1.2 Methylaspartate Ammonia-Lyase
 4.3.1.3 Histidine Ammonia-Lyase
 4.3.1.5 Phenylalanine Ammonia-Lyase
 4.3.99.1 Cyanate Lyase
 4.4.1.1 Cystathionine Gamma-Lyase
 4.4.1.2 Homocysteine Desulfhydrase
 4.4.1.8 Cystathionine Beta-Lyase
 6.3.1.1 Aspartate--Ammonia Ligase
 6.3.1.2 Glutamate--Ammonia Ligase
 6.3.1.4 Aspartate--Ammonia Ligase (ADP-Forming)
 6.3.1.5 NAD⁺ Synthase
 6.3.4.6 Urea Carboxylase
 6.3.4.16 Carbamoyl-Phosphate Synthase (Ammonia)
 6.3.5.4 Asparagine Synthase (Glutamine-Hydrolysing)

Metabolic Kit Catalog

Nucleotide Sugars Metabolism Kit A

1,4-B-D-Xylan
Arabinan
D-Galactose-1P
D-Galacturonate
D-Galacturonate-1P
dTDP:-6-Deoxy-L-Talose
dTDP-4-Acetamido-4,6-Dideoxy-D-Glucose
dTDP-4-Oxo-6-Deoxy-D-Glucose
dTDP-4-Oxo-L-Rhamnose
dTDP-D-Galactose
dTDP-D-Galacturonate
dTDP-D-Glucose
dTDP-D-Glucuronate
dTDP-L-Rhamnose
D-Xylose
D-Xylose-1P
GDP-4-Oxo-L-Rhamnose
GDP-L-Rhamnose
Glucose-1P
L-Arabinose
L-Arabinose-1P
Pectin
Pentosans
UDP-4-Oxo-6-Deoxy-D-Glucose
UDP-D-Apiose
UDP-D-Galactose
UDP-D-Galacturonate
UDP-D-Glucose
UDP-D-Glucuronate
UDP-D-Xylose
UDP-L-Arabinose
UDP-L-Iduronate
UDP-L-Rhamnose
1.1.1.22 UDPGlucose 6-Dehydrogenase
1.1.1.133 dTDP-4-Dehydrorhamnose Reductase
1.1.1.134 dTDP-6-Deoxy-L-Talose 4-Dehydrogenase
1.1.1.186 dTDPGalactose 6-Dehydrogenase
2.4.1.43 Polygalacturonate 4-Alpha...
2.4.1.67 Galactinol--Raffinose Galactosyltransferase
2.4.2.24 1,4-Beta-D-Xylan Synthase
2.6.1.33 dTDP-4-Amino-4,6-Dideoxy-D-Glucose Transaminase
2.7.1.44 Galacturonokinase
2.7.1.46 L-Arabinokinase
2.7.7.9 UTP--Glucose-1-Phosphate Uridyltransferase
2.7.7.10 UTP--Hexose-1-Phosphate Uridyltransferase
2.7.7.11 UTP--Xylose-1-Phosphate Uridyltransferase
2.7.7.12 UDP Glucose--Hexose-1-Phosphate Uridyltransferase
2.7.7.24 Glucose-1-Phosphate Thymidyltransferase
2.7.7.32 Galactose-1-Phosphate Thymidyltransferase
2.7.7.33 Gllucose-1-Phosphate Cytidyltransferase
2.7.7.37 Aldose-1-Phosphate Nucleotidyltransferase
3.2.1 Hydrolysing O-Glycosyl Compounds
3.2.1.37 Xylan 1,4-Beta-Xylosidase
3.2.1.55 Alpha-N-Arabinofuranosidase
4.1.1.35 UDP Glucuronate Decarboxylase
4.1.1.67 UDP Galacturonate Decarboxylase
4.2.1.46 dTDPGlucose 4,6-Dehydratase
4.2.1.76 UDPGlucose 4,6-Dehydratase
5.1.3.2 UDPGlucose 4-Epimerase
5.1.3.5 UDPArabinose 4-Epimerase

Nucleotide Sugars Metabolism Kit B

5.1.3.6 UDPGlucuronate 4-Epimerase
5.1.3.12 UDP:Glucuronate 5'-Epimerase
5.1.3.13 dTDP-4-Dehydrorhamnose 3,5-Epimerase

Metabolic Kit Catalog

One Carbon Pool By Folate Kit

1--Formyl-THF
5,10-Methenyl-THF
5,10-Methylene-THF
5,6,7,8-Tetrahydrofolate(THF)
5-Formimino
5-Formyl-THF
5-Methy-THF
7,8-Dihydrofolate
Folate
1.5.1.3 Dihydrofolate Reductase
1.5.1.5 Methylenetetrahydrofolate Dehydrogenase (NADP+)
1.5.1.6 Formyltetrahydrofolate Dehydrogenase
1.5.1.15 Methylenetetrahydrofolate Dehydrogenase (NAD+)
1.7.7 With An Iron-Sulfur Protein As Acceptor
1.7.99.5 5,10-Methylenetetrahydrofolate Reductase (FADH2)
2.1.1.13 5-Methyltetrahydrofolate--Homocysteine S-Methyltransferase
2.1.1.19 Trimethylsulfonium--Tetrahydrofolate
2.1.1.45 Thymidylate Synthase
2.1.2.1 Glycine Hydroxymethyltransferase
2.1.2.2 Phosphoribosylglycinamide Formyltransferase
2.1.2.3 Phosphoribosylaminoimidazolecarboxamide Formyltransferase
2.1.2.4 Glycine Formiminotransferase
2.1.2.5 Glutamate Formiminotransferase
2.1.2.7 D-Alanine 2-hydroxymethyltransferase
2.1.2.8 Deoxycytidylate 5-Hydroxymethyltransferase
2.1.2.9 Methionyl-tRNA Formyltransferase
2.1.2.10 Aminomethyltransferase
2.1.2.11 3-Methyl-2-Oxobutanoate Hydroxymethyltransferase
3.5.1.10 Formyltetrahydrofolate Deformylase
3.5.4.9 Methylenetetrahydrofolate Cyclohydrolase
4.3.1.4 Formiminotetrahydrofolate Cyclodeaminase
6.3.3.2 5-Formyltetrahydrofolate Cyclo-Ligase
6.3.4.3 Formate--Tetrahydrofolate Ligase

Pantothenate And CoA Biosynthesis Kit

3,3-Dimethylmalate
4-Dehydropantoate
4'-Phosphopantothenoyl-L-Cysteine
Pantoate
Pantothenate
2,3-Dihydroxy-3-Methylbutanoate
2-Acetolactate
2-Dehydropantoate
3-Methyl-2-Oxobutanoate
4'-Phosphopantetheine
5,6-Dihydrouracil
Acyl-Carrier-Protein
Adenosine 3',5'-Bisphosphate
Apo-{Acp}
B-Alanine
Coenzyme A(CoA)
D-4'-Phosphopantothenate
Dephospho-CoA
L-Cysteine
L-Valine
N-Carbamoyl-B-Alanine
N-Pantothenoyl-Cysteine
Pantetheine
Pantothenol
Pyruvate
Uracil
1.1.1.84 Dimethylmalate Dehydrogenase
1.1.1.86 Ketol-Acid Reductoisomerase
1.1.1.106 Pantoate 4-Dehydrogenase
1.1.1.169 2-Dehydropantoate 2-Reductase
1.2.1.33 Dehydropantoate Dehydrogenase
1.3.1.1 Dihydrouracil Dehydrogenase(NAD+)
1.3.1.2 Dihydropyrimidine Dehydrogenase (NADP+)
2.1.2.11 3-Methyl-2-Oxobutanoate Hydroxymethyltransferase
2.6.1.6 Leucine Transaminase
2.6.1.42 Branched-Chain-Amino-Acid Transaminase
2.7.1.24 Dephospho-CoA Kinase
2.7.1.33 Pantothenate Kinase
2.7.1.34 Pantetheine Kinase
2.7.7.3 Pantetheine-Phosphate Adenylyltransferase
2.7.8.7 Holo-{Acyl-Carrier Protein} Synthase
3.1.4.14 {Acyl-Carrier-Protein} Phosphodiesterase
3.5.1 In Linear Amides
3.5.1.6 Beta-Ureidopropionase
3.5.1.22 Pantothenase
3.5.2.2 Dihydropyrimidinase
3.6.1.9 Nucleotide Pyrophosphatase
4.1.1.30 Pantothenoylcysteine Decarboxylase
4.1.1.36 Phosphopantothenoylcysteine Decarboxylase
4.1.3.18 Acetolactate Synthase
4.2.1.9 Dihydroxy-Acid Dehydratase
6.3.2.1 Pantoate--Beta-Alanine Ligase
6.3.2.5 Phosphopantothenate--Cysteine Ligase

Metabolic Kit Catalog

Penicillins/Clavulanic Acid/Tetracycline/Puromycin

Biosynthesis Kit

5(L-2-Aminoacidipyl)-L-Cysteiny-D-Valine
 7A-Hydroxy-O-Carbamoyl-Deacetylcephalosporin C
 Aminoacidip.
 Aminoacidip.-S
 Cephalosporin C
 Cephamycin C
 Deacetoxycephalosporin C
 Deacetylcephalosporin C
 Isopenicillin N
 L-2-Aminoacidipate
 L-2-Aminoacidipate Adenylate
 L-Cysteine
 L-Valine
 O-Carbamoyl-Deacetyl-Cephalosporin C
 Penicillin G
 Penicillin N
 Arginine
 Calvulanic Acid
 Clavaminic Acid
 Clavulanate-9-Aldehyde
 Deoxyguanidino-Proclavaminic Acid
 Dihydroclavaminic Acid
 Guanidino-Proclavaminic Acid
 Nd2-(2-Carboxyethyl)Arginine
 Proclaviminic Acid
 Pyruvate
 12-Dehydrotetracycline
 2-Oxosuccinamate
 4-Dedimethyl-6-Dehydroanhydrotetracycline
 4-Dedimethylamine-4-Oxo-Anhydro-7-Cl-Tetracycline
 4-Dedimethylamino-4-Oxo-Anhydrotetracycline
 4-Hydroxy-6-Methyl-Pretetramide
 6-Methylpretetramide
 Acetyl-CoA
 Anhydrotetracycline
 Chlortetracycline
 L-Asparagine
 Malonamoyl-CoA
 Malonyl-CoA
 Oxytetracycline
 Tetracycline
 1.14.13.38 Anhydrotetracycline Monooxygenase
 2.6.1.14 Asparagine--Oxo-Acid Transaminase
 6.4.1.2 Acetyl-CoA Carboxylase
 3'-Amino-3'-Deoxy-AMP
 3'-Keto-3'-Deoxy-AMP
 3'-Keto-3'-Deoxy-ATP
 N6,N6,O-tridemethylpuromycin-5'-Phosphate
 N-Acetyl-N6,N6,O-Tridemethylpuromycin-5'-Phosphate
 N-Acetyl-N6,O-Didemethylpuromycin-5'-Phosphate
 N-Acetyl-O-Demethylpuromycin
 N-Acetyl-O-Demethylpuromycin-5'-Phosphate
 N-Acetylpuromycin
 Puromycin
 Tyrosine
 2.1.1.38 Myo-Inositol 1-O-Methyltransferase

Pentose And Glucuronate Interconversions Kit A

(4R,5S)-4,5,6-Trihydroxy-2,3-Dioxohexanoate
 (4S)-4,6-Dihydroxy-2,5-Dioxohexanoate
 2-Dehydro-3-Deoxy-D-gluconate
 2-Dehydro-3-Deoxy-D-Gluconate-6P
 2-Dehydro-3-Deoxy-d-Xylonate
 3-Dehydro-L-Gulonate
 4-(4-Deoxy-Alpha-D-Gluc-4-Enuronosyl)-D-Gal.
 4-(4-Deoxy-Beta-D-Gluc-4-Enuronosyl)-D-Gal
 5-Dehydro-4-Deoxy-D-Gulcuronate
 a-D-Glucose-1P
 CD Pribitol
 D-Altronate
 D-Arabitol
 D-Frucuronate
 D-Galacturonate
 D-Glucuronate
 D-Glucuronate-1P
 D-Glycer-Aldehyde-3P
 D-Lyxose
 D-Mannonate
 D-Ribitol-5P
 D-Ribulose
 D-Ribulose-5P
 D-Ribulose-5P
 D-Tagaturonate
 D-Xylonate
 D-Xylonolactone
 D-Xylose
 D-Xylulose
 Glycerone-P
 Glycolaldehyde
 L-Arabinose
 L-Arabitol
 L-Gulonate
 L-Lyxonate
 L-Lyxose
 L-Ribulose
 L-Ribulose-5P
 L-Xylono-1,4-Lactone
 L-Xylose
 L-Xylulose
 L-Xylulose -1P
 L-Xylulose-5P
 Poly(1,4-Alpha-D-Glucuronate)(N)
 Poly(1,4-Alpha-D-Glucuronide)
 Pyruvate
 Ribitol
 UDP-D Glucuronate
 UDPGlucose
 Xylitol
 1.1.1.10 L-Xylulose Reductase
 1.1.1.11 D-Arabinol 4-Dehydrogenase
 1.1.1.113 L-Lyxose 1-Dehydrogenase
 1.1.1.12 L-Arabinol 4-Dehydrogenase
 1.1.1.125 2-Deoxy-D-Gluconate 3-Dehydrogenase
 1.1.1.127 2-Dehydro-3-Deoxy-D-Gluconate 5-Dehydrogenase
 1.1.1.13 L-Arabinol 2-Dehydrogenase
 1.1.1.130 3-Dehydro-L-gulonate 2-dehydrogenase
 1.1.1.137 Ribitol-5-phosphate 2-dehydrogenase
 1.1.1.15 D-Iditol 2-Dehydrogenase
 1.1.1.175 D-Xylose 1-dehydrogenase

Metabolic Kit Catalog

Pentose And Glucuronate Interconversions Kit B

1.1.1.19 Glucuronate Reductase
 1.1.1.2 Alcohol Dehydrogenase (NADP+)
 1.1.1.21 Aldehyde reductase
 1.1.1.22 UDPGlucose 6-Dehydrogenase
 1.1.1.45 L-Gulonate 3-Dehydrogenase
 1.1.1.56 Ribitol 2-Dehydrogenase
 1.1.1.57 Fructuronate Reductase
 1.1.1.58 Tagaturonate Reductase
 1.1.1.9 D-Xylulose Reductase
 1.1.2.2 Mannitol dehydrogenase (cytochrome)
 2.4.1.17 Glucuronosyltransferase
 2.7.1.16 Ribulokinase
 2.7.1.17 Xylulokinase
 2.7.1.43 Glucuronokinase
 2.7.1.45 2-Dehydro-3-deoxygluconokinase
 2.7.1.5 Rhamnulokinase
 2.7.1.53 L-Xylulokinase
 2.7.7.40 D-Ribitol-5-Phosphate Cytidylyltransferase
 2.7.7.44 Glucuronate-1-Phosphate Uridylyltransferase
 2.7.7.9 UTP--Glucose-1-Phosphate Uridylyltransferase
 3.1.1 Carboxylic Ester Hydrolases
 3.1.1.11 Pectinesterase
 3.1.1.68 Xylono-1,4-Lactonase
 3.2.1.15 Polygalacturonase
 4.1.1.3 Oxaloacetate Decarboxylase
 4.1.1.34 Dehydro-L-Gulonate Decarboxylase
 4.1.2.14 2-Dehydro-3-Deoxyphosphogluconate Aldolase
 4.1.2.19 Rhamnulose-1-Phosphate Aldolase
 4.1.2.28 2-Dehydro-3-Deoxy-D-Pentonate Aldolase
 4.1.3.16 4-Hydroxy-2-Oxoglutarate Aldolase
 4.2.1.7 Altronate Dehydratase
 4.2.1.8 Mannonate Dehydratase
 4.2.1.82 Xylonate Dehydratase
 4.2.2.2 Pectate Lyase
 4.2.2.6 Oligogalacturonide Lyase
 5.1.3.1 Ribulose-Phosphate 3-Epimerase
 5.1.3.4 L-Ribulose-Phosphate 4-Epimerase
 5.3.1 Interconverting Aldoses And Ketoses
 5.3.1.12 Glucuronate Isomerase
 5.3.1.15 D-Lyxose Ketol-Isomerase
 5.3.1.17 4-Deoxy-L-Threo-5-Hexosulose....
 5.3.1.4 L-Arabinose Isomerase
 5.3.1.5 Xylose Isomerase

Pentose Phosphate Cycle Kit A

2-Dehydro-3-Deoxy-D-Gluconate
 2-Dehydro-D-Gluconate
 2-Dehydro-D-Gluconate-6P
 2-Dehydro-D-Glucono-1,5-Lactone
 2-Dehydro-D-Glucose
 2-Deoxy-D-Ribose
 2-Deoxy-D-Ribose-1P
 2-Deoxy-D-Ribose-5P
 6-Phospho-D-Gluconate
 Aminosugars
 B-D-Fructose-1,6P2
 B-D-Fructose-6P
 B-D-Glucose
 CO2
 D-Erythrose-4PD
 D-Fructose-6P
 D-Gluconate
 D-Glucono-1,5-Lactone
 D-Glucono-1,5-Lactone-6P
 D-Glucosamine
 D-Glucose
 D-glucose-6P
 D-Glyceraldehyde-3P
 D-Ribose
 D-Ribose-1P
 D-Ribulose-5P
 D-Sedoheptulose-7P
 D-Xylulose-5P
 PRPP
 Ribose-5P
 1.1.1.43 Phosphogluconate 2-Dehydrogenase
 1.1.1.44 Phosphogluconate Dehydrogenase...
 1.1.1.47 Glucose 1-Dehydrogenase
 1.1.3 With Oxygen as Acceptor
 1.1.3.10 Pyranose Oxidase
 1.1.3.4 Glucose Oxidase
 1.1.3.5 Hexose Oxidase Epimerase
 1.1.99.10 Glucose Dehydrogenase (Acceptor)
 1.1.99.17 Glucose Dehydrogenase...
 1.1.99.3 Gluconate 2-Dehydrogenase
 2.2.1.1 Transketolase
 2.2.1.2 Transaldolase
 2.7.1.11 6-Phosphofructokinase
 2.7.1.12 Gluconokinase
 2.7.1.13 Dehydrogluconokinase
 2.7.1.15 Ribokinase
 2.7.1.45 2-Dehydro-3-Deoxygluconokinase
 2.7.6.1 Ribose-Phosphate Pyrophosphokinase
 3.1.1.17 Gluconolactonase
 3.1.1.31 6-Phosphogluconolactonase
 3.1.3.11 Fructose-Bisphosphatase
 4.1.2.13 Fructose-Bisphosphate aldolase
 4.1.2.4 Deoxyribose-Phosphat Aldolase
 4.1.2.9 Phosphoketolase
 4.2.1.12 Phosphogluconate Dehydratase
 4.2.1.26 Aminodeoxygluconate Dehydratase
 4.2.1.39 Gluconate Dehydratase
 5.1.3.1 Ribulose-Phosphate 3-Epimerase
 5.3.1.6 Ribose-5-Phosphate Epimerase
 5.3.1.9 Glucose-6-Phosphate Isomerase

Pentose Phosphate Cycle Kit B

5.4.2.2 Phosphoglucomutase
 5.4.2.7 Phosphopentomutase

Peptideglycan Biosynthesis Kit

Crosslinked Peptideglycan
 D-Ala-D-Ala
 D-Alanine
 D-Alanine
 Gly-tRNA(Gly)
 MurG
 MurNAc-L-Ala
 N-Acetyl-D-Muramoate
 Peptideglycan
 Pi
 tRNA(Gly)
 UDP
 UDPGlcNAc
 UDP-MurNAc-L-Ala-D-Glu
 UDP-MurNAc-L-Ala-D-Glu-L-Lys
 UDP-MurNAc-L-Ala-D-Glu-L-Lys-D-Ala
 UDP-MurNAc-L-Ala-D-Glu-L-Lys-D-Ala-D-Ala
 UDP-MurNAc-L-Ala-D-Glu-Meso-2,6-Diaminopimelate
 UDP-MurNAc-L-Ala-D-Glu-Meso-2,6-Diaminopimeloyl-D-Ala-D-Ala
 UDP-MurNAc-L-Ala-Gamma-D-Glu-L-Lys
 UDP-MurNAc-L-Ala-Gamma-D-Glu-L-Lys-D-Ala-D-Ala
 UDP-N-Acetylmuramate
 UDP-N-MurNAc-L-Ala
 UMP
 Undecaprenol
 Undecaprenyl-P
 Undecaprenyl-PP
 Und-PP-MurNAc-(GlcNAc)-L-Ala-D-Gln-Meso-2,6-Diaminopimeloyl-(Gly)5-D-Ala-D-Ala
 Und-PP-MurNAc(GlcNAc)-L-Ala-D-Gln-Meso-2,6-Diaminopimeloyl-D-Ala-D-Ala
 Und-PP-MurNAc-(GlcNAc)-L-Ala-D-Gln-L-Lys-(Gly)5-D-Ala-D-Ala
 Und-PP-MurNAc-(GlcNAc)-L-Ala-D-Gln-L-Lys-D-Ala-D-Ala
 Und-PP-MurNAc-(GlcNAc)-L-Ala-D-Glu-L-Lys-D-Ala-D-Ala
 Und-PP-MurNAc-(GlcNAc)-L-Ala-D-Glu-Meso-2,6-Diaminopimeloyl-D-Ala-D-Ala
 Und-PP-MurNAc-(GlcNAc)-L-Ala-D-Isoglutaminyl-L-Lys-(Gly)5-D-Ala-D-Ala
 Und-PP-MurNAc-(GlcNAc)-L-Ala-D-Isoglutaminyl-L-Lys-D-Ala-D-Ala
 Und-PP-MurNAc-(GlcNAc)-L-Ala-Gamma-D-Glu-L-Lys-D-Ala-D-Ala
 Und-PP-MurNAc-L-Ala-D-Glu-L-Lys-D-Ala-D-Ala
 Und-PP-MurNAc-L-Ala-D-Glu-Meso-2,6-Diaminopimeloyl-D-Ala-D-Ala
 Und-PP-MurNAc-L-Ala-Gamma-D-glu-L-Lys-D-Ala-D-Ala
 2.4.1 Hexosyltransferases
 2.4.1.129 Peptidoglycan Glycosyltransferase
 2.6.1.21 D-Alanine Transaminase
 2.7.1.66 Undecaprenol Kinase
 2.7.8.13 Phospho-N-Acetylmuramoyl-Pentapeptide-Transferase
 3.4.17.8 Muramoylpentapeptide Carboxypeptidase
 3.5.1.28 N-Acetylmuramoyl-L-Alanine Amidase
 3.6.1.27 Undecaprenyl-Diphosphatase
 6.3.1.2 Glutamate--Ammonia Ligase
 6.3.2.4 D-Alanine-D-alanine Ligase
 6.3.2.7 UDP-N-Acetylmuramoyl-L-Alanyl-D-Glutamate....
 6.3.2.8 UDP-N-Acetylmuramate--Alanine Ligase
 6.3.2.9 UDP-N-Acetylmuramoylalanine--D-Glutamyl-Ligase
 6.3.2.10 UDP-N-Acetylmuramoylalanyl-D-Glutamyl-Lysine...
 6.3.2.13 UDP-N-Acetylmuramoylalnyl-D-Glutamate.....
 6.3.2.15 UDP-N-Acetylmuramoylalanyl-D...

Phenylalanine Metabolism Kit A

Succinate
 2-Hydroxy-6-Oxonona-2,4-Diene-1,9-Dioate
 2,3-Dihydroxy-Phenylpropanoate
 2-Hydroxyphenyl-Propanoate
 Trans-2-Hydroxycinnamate
 Phenylpropanoate
 Cis-1,2-Dihydrobenzene-1,2-Diol
 Benzene
 Salicylate
 Salicylaldehyde
 Trans-O-Hydroxybenzyl-Idenepyrivate
 2-Hydroxychromene-2-Carboxylate
 Naphthalene-1,2-Diol
 1,2-Dihydro-Naphthalene-1,2-Diol
 Naphthalene
 Benzoate
 Trans-Cinnamate
 Hippurate
 Benzoyl-CoA
 4-Hydroxy-Benzoyl-CoA
 Benzoyl-P
 Trans-4-Hydroxy-Cinnamate
 4-Hydroxybenzoate
 Protocatechuate
 Phenol
 Gentisate
 3-Hydroxybenzoate
 Anthranilate
 2,3-Dihydroxy-Benzoate
 Catechol
 3-Carboxy-2-Hydroxymuconate Semialdehyde
 2-Hydroxy-Muconate
 Cis,Cis-Muconate
 B-Carboxy-Muconate
 4-Carboxy-2-Hydroxy-Muconate Semialdehyde
 2-Hydroxy-Muconate Semialdehyde
 Y-Carboxy-Mucono-Lactone
 2-Hydroxy-2-Hydropyrone-4,6-Dicarboxylate
 Gallate
 3-O-Methylgallate
 Mucono-Lactone
 3-Carboxy-2,5-Dihydro-5-Oxofuran-2-Acetate
 Y-Oxalo-Crotonate
 3-Oxoadipate Enol-Lactone
 Hydroxy-Quinol
 2-Pyrone-4,6-Dicarboxylate
 2-Oxopent-4-Enoate
 3-Oxoadipate
 3-Hydroxy-Cis,Cis-Muconate
 4-Carboxy-2-hydroxyhexa-2,4-Dienedioate
 4-Hydroxy-Benzaldehyde
 4-Cresol
 Acetyl-CoA
 Succinyl-CoA
 3-Oxoadipyl-CoA
 2-Maleyl-Acetate
 4-Carboxy-2-Oxo-3-Hexenedioate
 4-Hydroxy-Benzoylformate
 4-Carboxy-2-Oxo-4-Pentanoate
 4-Carboxy-2-Hydroxy-Cis,Cis-Muconate

Metabolic Kit Catalog

Phenylalanine Metabolism Kit B

Cis-4-Carboxy Methylenebut-2-En-4-Olide
 4-Hydroxy-4-Methyl-2-Oxoglutarate
 4-Carboxy-4-Hydroxy-2-Oxoadipate
 4-Hydroxy-4-Carboxymethyl-2-Oxoglutarate
 (S)-4-Hydroxy-Mandelate
 3-Chlorocatechol
 3-Chloro-Cis,Cis-Muconate
 2-Chloro-5-Oxo-2,5-Dihydrofuran-2-Acetate
 Pyruvate
 Oxaloacetate
 4-Hydroxy-Mandelate
 2-Phenylacetamide
 D-Phenylalanine
 N-Acetyl-D-Phenylalanine
 N-Acetyl-L-Phenylalanine
 2-Hydroxy-3-Phenylpropenoate
 Phenyl-Ethylalcohol
 Phenylalanine
 Phenylpyruvate
 Phenyl-Acetaldehyde
 Phenylacetate
 2-Hydroxy-Phenylacetate
 Phenylacetate
 2,6-Dihydroxy-Phenylacetate
 Phenyl-Acetyl-CoA
 Phenylethylamine
 4-Hydroxyphenyl-Acetylglycine
 4-Hydroxyphenyl-Acetylglutamine
 Benzylalcohol
 Benzaldehyde
 Toluene
 (1S,2R)-3-Methylcyclohexa-3,5-Diene-1,2-Diol
 2-Hydroxy-Toluene
 3-Hydroxy-Toluene
 3-Methylcatechol
 Benzoylformate
 Benzylformate
 2-Hydroxy-6-Keto-2,4-Heptadienoate
 (S)-Mandelate
 @-Mandelate
 2-Hydroxy-2,4-Pentadienoate
 4-Hydroxy-2-Oxopentanoate
 Acetaldehyde
 1.1.1 With NAD⁺ or NADP⁺ As Acceptor
 1.1.1.90 Aryl-Alcohol Dehydrogenase
 1.1.1.222 @-4-Hydroxyphenyllactate Dehydrogenase
 1.1.1.237 Hydroxyphenylpyruvate Reductase
 1.1.99 With Other Acceptors
 1.2.1 With NAD⁺ or NADP⁺ As Acceptor
 1.2.1.5 Aldehyde Dehydrogenase (NAD(P)⁺)
 1.2.1.7 Benzaldehyde Dehydrogenase (NADP⁺)
 1.2.1.28 Benzaldehyde Dehydrogenase (NAD⁺)
 1.2.1.32 Aminomuconate-Semialdehyde Dehydrogenase
 1.2.1.39 Phenylacetaldehyde Dehydrogenase
 1.2.1.45 4-Carboxy-2-Hydroxy-6-Methylsalicylate Dehydrogenase
 1.3.1.11 Coumarate Reductase
 1.3.1.19 Cis-1,2-Dihydrobenzene-1,2-Diol Dehydrogenase
 1.3.1.29 Cis-1,2-Dihydro-1,2-Dihydroxynaphthalene Dehydrogenase
 1.3.1.31 2-Enoate Reductase
 1.3.1.32 Maleylacetate Reductase

Phenylalanine Metabolism Kit C

1.3.99 With Other Acceptors
 1.4.1.20 Phenylalanine Dehydrogenase
 1.4.3.2 L-Amino-Acid Oxidase
 1.4.3.4 Amine Oxidase(Flavin-containing)
 1.4.3.6 Amine Oxidase(Copper-Containing)
 1.4.99.1 D-Amino-Acid Dehydrogenase
 1.4.99.4 Aralkylamine Dehydrogenase
 1.11.1.7 Peroxidase
 1.13.11 With Incorporation of Two Atoms of Oxygen
 1.13.11.1 Catechol 1,2-Dioxygenase
 1.13.11.2 Catechol 2,3-Dioxygenase
 1.13.11.3 Protocatechuate 3,4-Dioxygenase
 1.13.11.8 Protocatechuate 4,5-Dioxygenase
 1.13.11.14 2,3-Dihydroxybenzoate 3,4-Dioxygenase
 1.13.11.16 3-Carboxyethylcatechol 2,3-Dioxygenase
 1.13.11.27 4-Hydroxyphenylpyruvate Dioxygenase
 1.13.11.37 Hydroxyquinol 1,2-Dioxygenase
 1.13.12.9 Phenylalanine 2-Monooxygenase
 1.14.12.1 Anthranilate 1,2-Dioxygenase
 1.14.12.3 Benzene 1,2-Dioxygenase
 1.14.12.10 Benzoate 1, 2-Dioxygenase
 1.14.12.11 Toluene Dioxygenase
 1.14.12.12 Naphthalene 1, 2-Dioxygenase
 1.14.1.3 With NADH or NADPH as One Donor....
 1.14.13.1 Salicylate 1-Monooxygenase
 1.14.13.2 4-Hydroxybenzoate 3-Monooxygenase
 1.14.13.4 Melilotate 3-Monooxygenase
 1.14.13.7 Phenol 2-Monooxygenase
 1.14.13.11 Trans-Cinnamate 4-Monooxygenase
 1.14.13.12 Benzoate 4-Monooxygenase
 1.14.13.23 3-hydroxybenzoate 4-Monooxygenase
 1.14.13.24 3-Hydroxybenzoate 6-Monooxygenase
 1.14.13.33 4-Hydroxybenzoate 3-Monooxygenase
 1.14.13.35 Anthranilate 3-Monooxygenase
 1.14.15 With A Reduced Iron.....
 1.14.16.6 Mandelate 4-Monooxygenase
 1.14.99 Miscellaneous
 1.14.99.23 3-Hydroxybenzoate 2-Monooxygenase
 1.1.7.99.1 4-Cresol Dehydrogenase(Hydroxylating)
 2.3.1 Acyltransferases
 2.3.1.14 Glutamine N-Phenylacetyltransferase
 2.3.1.16 Acetyl-CoA C-Acyltransferase
 2.3.1.36 D-Amino-Acid N-Acetyltransferase
 2.3.1.53 Phenylalanine N-Acetyltransferase
 2.3.1.71 Glycine N-Benzoyltransferase
 2.6.1.1 Aspartate Transaminase
 2.6.1.5 Tyrosine Transaminase
 2.6.1.9 Histidinol-Phosphate Transaminase
 2.6.1.21 D-Alanine Transaminase
 2.6.1.57 Aromatic-Amino-Acid Transaminase
 2.8.3.6 3-Oxoadipate CoA-Transferase
 3.1.1.24 3-Oxoadipate Enol-Lactonase
 3.1.1.45 Carboxymethylenebutenolidase
 3.1.1.57 2-Pyrone-4,6-Dicarboxylate Lactonase
 3.5.1.4 Amidase
 3.5.1.32 Hippurate Hydrolase
 3.6.1.7 Acylphosphatase
 3.7.1 In Ketonic Substances
 3.7.1.9 2-Hydroxy-6-Methylsalicylate Hydrolase
 4.1.1.7 Benzoylformate Decarboxylase

Metabolic Kit Catalog

Phenylalanine Metabolism Kit D

4.1.1.28 Aromatic-L-Amino-Acid Decarboxylase
4.1.1.43 Phenylpyruvate Decarboxylase
4.1.1.44 4-Carboxymuconolactone Decarboxylase
4.1.1.46 O-Pyrocatechuate Decarboxylase
4.1.1.53 Phenylalanine Decarboxylase
4.1.1.61 4-Hydroxybenzoate Decarboxylase
4.1.1.63 Protocatechuate Decarboxylase
4.1.1.77 4-Oxalocrotonate Decarboxylase
4.1.2 Aldehyde-Lyases
4.1.3.17 4-Hydroxy-4-Methyl-2-Oxoglutarate Aldolase
4.2.1 Hydro-Lyases
4.2.1.80 2-Oxopent-4-Enoate Hydratase
4.3.1.5 Phenylalanine Ammonia-Lyase
5.1.1.11 Phenylalanine Racemase(ATP-Hydrolysing)
5.1.2.2 Mandelate Racemase
5.3.2.1 Phenylpyruvate Tautomerase
5.3.3.4 Muconolactone Delta-Isomerase
5.3.3.10 5-Carboxymethyl-2-Hydroxymuconate Delta-Iso.
5.3.99 Other Intramolecular Oxidoreductases
5.5.1.1 Muconate Cycloisomerase
5.5.1.2 3-Carboxy-Cis,Cis-Muconate Cycloisomerase
5.5.1.5 Carboxy-Cis,Cis-Muconate Cyclase
5.5.1.7 Chloromuconate Cycloisomerase
6.2.1.21 Phenylacetate--CoA Ligase
6.2.1.25 Benzoate--CoA Ligase
6.2.1.27 4-Hydroxybenzoate--CoA Ligase
6.2.1.30 Phenylacetate--CoA-Ligase

Phenylalanine, Tyrosine And Tryptophan Biosynthesis Kit

(3-Indolyl)-Glycerol Phos.
1-(2-Carb.-Phenyl)-1-De.
3-Dehydro-Quinate
3-Dehydro-Shikimate
4-Hydroxy-Phenylpyru.
5-O-(1-Carb.)-3-Phosph.
7P-2-Deh.-3-Deo.-D-Ara.
Anthronilate
Chorismate
D-Erythrose 4-Phosph.
Histidine
L-Tryptophan
N-(5-Pho.-B-D-Rib.)-Anth.
Phenylpyruvate
Phe-tRNA
Phenylalanine
Phosphoenol-Pyruvate
Prephenate
Pretyrosine
Protocatechuate
Shikimate
Shikimate 3-Phosphate
Tyrosine
Tyr-tRNA
1.1.1.24 Quinate 5-Dehydrogenase
1.1.1.25 Shikimate 5-Dehydrogenase
1.1.99.25 Quinate Dehydrogenase(Pyroloquinoline-Quinone)
1.3.1.12 Prephenate Dehydrogenase
1.3.1.13 Prephenate Dehydrogenase (NADP+)
1.3.1.43 Cyclohexadienyl Dehydrogenase
1.3.1.52 2-Methyl-Branched-Chain-Enoyl-CoA Reductase
1.4.1.20 Phenylalanine Dehydrogenase
1.4.3.2 L-Amino-Acid Oxidase
1.14.16.1 Phenylalanine 4-Monooxygenase
2.4.2.18 Anthranilate Phosphoribosyltransferase
2.5.1.19 3-Phosphoshikimate 1-Carboxyvinyltransferase
2.6.1.1 Aspartate Transaminase
2.6.1.5 Tyrosine Transaminase
2.6.1.9 Histidinol-Phosphate Transaminase
2.6.1.57 Aromatic-Amino-Acid Transaminase
2.7.1.71 Shikimate Kinase
4.1.1.48 Indole-3-Glycerol-Phosphate Synthase
4.1.2.15 2-Dehydro-3-Deoxyphosphoheptonate Aldolase
4.1.3.27 Anthranilate Synthase
4.2.1.10 3-Dehydroquinate Dehydratase
4.2.1.11 Phosphopyruvate Hydratase
4.2.1.20 Tryptophan Synthase
4.2.1.51 Prephenate Dehydratase
4.2.1.91 Carboxycyclohexadienyl Dehydratase
4.6.1.3 3-Dehydroquinate Synthase
4.6.1.4 Chorismate Synthase
5.3.1.24 Phosphoribosylantranilate Isomerase
5.4.99.5 Chorismate Mutase
6.1.1.1 Tyrosine--tRNA Ligase
6.1.1.20 Phenylalanine--tRNA Ligase

Metabolic Kit Catalog

Phospholipid Degradation Kit

1,2-Diacylglycerol-3P
1,2-Diacylglycerol
1-Acyl-2-[(S)-12-Hydroxyoleoyl]-glycero-3-Phosphocholine
1-Acyl-2-Oleoyl-Glycero-3-Phosphocholine
1-Acylglycero-3-Phosphocholine
1-Alkenyl-2-Acyl-glycero-3-Phosphocholine
1-Alkenyl-Glycero-3-Phosphocholine
2-Acylglycero-3-Phosphocholine
Choline
Fatty Acid
Glycero-3P
Glycero-3-Phosphocholine
Phosphatidylcholine(Lecithin)
Phosphocholine
1.14.13.26 Phosphatidylcholine 12-Monooxygenase
2.3.1.25 Plasmalogen Synthase
3.1.1.4 Propphospholipase A2
3.1.1.5 Lisophospholipase
3.1.1.32 Phospholipase A1
3.1.3.4 Phosphatidate Phosphatase
3.1.4.2 Glycerophosphocholine Phosphodiesterase
3.1.4.3 Phospholipase C
3.1.4.4 Phospholipase D
3.1.4.46 Glycerophosphodiester Phosphodiesterase
3.3.2.2 Alkenylglycerophosphocholine Hydrolase

Lipopolysaccharide Biosynthesis Kit

2,3-Bis-(3-Hydroxytetradecanoyl)-Beta-D-Glucosaminyl-1P
3-Deoxy-D-Manno-Octulosonate
3-Deoxy-D-Manno-Octulosonate-8P
CMP-3-Deoxy-D-Manno-Octulosonate
D-Arabinose-5P
KDO2-Lipid IV(A)
KDO2-Lipid(A)
KDO-Lipid IV(A)
Lauroyl-KDO2-Lipid IV(A)
Lipid A Disaccharide
Lipid IV(A)
Lipopolysaccharide
UDP-2,3-Bis-(3-Hydroxytetradecanoyl)-Glucosamine
UDP-3-O-(3-Hydroxytetradecanoyl)-D-Glucosamine
UDP-3-O-(3-Hydroxytetradecanoyl)-N-Acetylglucosamine
UDP-N-Acetyl-D-Glucosamine
2.3.1 Acyltransferases
2.3.1.129 Acyl-(Acyl-Carrier-Protein).....
2.4.1.182 Lipid-A-Disaccharide Synthase
2.4.99 Transferring Other Glycosyl Groups
2.7.1.130 Tetraacyldisaccharide 4'-Kinase
2.7.7.38 3-Deoxy-Manno-Octulosonate Cytidyltransferase
3.1.3.45 3-Deoxy-Manno-Octulosonate-8-Phosphatase
3.5.1 In Linear Amides
3.6.1.45 UDP-Sugar Siphosphatase
4.1.2.16 2-Dehydro-3-Deoxyphosphooctonate Aldolase

Porphyrin And Chlorophyll II Metabolism Kit A

1-Amino-Propan-2-O1
4,5-Dioxopentanoate
5-Amino-Levulinate
Acetate
Adenosine-GDP-Cobinamide
Adenosylcobinamide
Adenosylcobinamide Phosph.
Adenosylcoby. AC Diamide
Adenosylcoby. Hexaamide
Apoferritin
Aportanferrin
Aquacob(III)alamin
A-Ribazole-5'-P
A-Ribazole
Bacteno-Pheophytins
Bacterio-Chlorophylls
Bilirubin
Bilirubin B-Diglucuronide
Biliverdin
Catalase
Chlorophyll A
Chlorophyll B
Chlorophyllide A
Cob(1)yrinate A,C Diamide
Cob(II)yrinate A,C Diamide
Coenzyme F430
Coproporphyrin I
Coproporphyrin III
Coproporphyrinogen 1
Coproporphyrinogen III
Cyanocob(III)alamin
Cytochrome A
Cytochrome C
Dimethylbenzimidazole
D-Urobilinogen
Fe++
Fe+++
Ferritin-Fe
Glutamate-1Semialdehyde
Hemoglobin
Hydrogenobyriate
Hydrogenob. A,C Diamide
Hydroxymethyl-Bilane
L-Glutamate
L-Glutamyl-1P
L-Gluta.-tRNA(Glu)HemA
Magnesium Protoporph. IX
Mg-2,4-Div.-Pha. A5-Mon.
Mg-Protoporphyrin-Mono.
Myoglobin
Oxyhemoglobin
Peroxidase
Pheophytins
Phycoerythrobilin
Phythyl-PP
Porphobilinogen
Precorrin 2
Precorrin 3A
Precorrin 3B
Precorrin 4

Metabolic Kit Catalog

Porphyrin And Chlorophyll II Metabolism Kit B

Precorrin 5
Precorrin 6A
Precorrin 6B
Precorrin 8X
Protoheme(Heme)
Protoporphyrin IX
Protoporphyrinogen IX
Pycocyanobilin
Pyphytychromobilin
Sirochlorin
Siroheme
Transferrin-Fe
Urobilins
Uroporphyrinogen III
Uroporphyrinogen 1
Uroporphyrin 1
Uroporphyrin III
Vitamin B12 Coenzyme
Vitamin B12R
Vitamin B12S
1.2.1 With NAD+ OR NADP+ As Acceptor
1.2.1.41 Glutamate-5-Semialdehyde Dehydrogenase
1.3.1.24 Biliverdin Reductase
1.3.1.33 Protochlorophyllide Reductase
1.3.1.54 Precorrin-6X Reductase
1.3.3.3 Coproporphyrinogen Oxidase
1.3.3.4 Protoporphyrinogen Oxidase
1.3.3.5 Bilirubin Oxidase
1.6.99 With Other Acceptors
1.6.99.8 Aquacobalamin Reductase
1.6.99.7 Cob(II)Alamin Reductase
1.6.99.11 Aquacobalamin Reductase (NADPH)
1.6.99.12 Cyanocobalamin Reductase....
1.14.99.3 Heme Oxygenase(Decyclizing)
1.16.1.2 Differic-Transferrin Reductase
1.16.3.1 Ferroxidase
1.18.1.2 Ferredoxin--NADP+ Reductase
2.1.1 Methyltransferases
2.1.1.11 Magnesium-Protoporphyrin O-Methyltransferase
2.1.1.107 Uroporphyrin-III C-Methyltransferase
2.1.1.130 Precorrin-2 C20-Methyltransferase
2.1.1.131 Precorrin-3B C17-Methyltransferase
2.1.1.132 Precorrin-6Y C5,15-Methyltransferase(Decarboxylating)
2.1.1.133 Precorrin-4 C11-Methyltransferase
2.4.1.17 Glucuronosyltransferase
2.4.2.21 Nicotinate-Nucleotide--Dimethylbenzimidazole
2.5.1 Transferring Alkyl or Aryl Groups
2.5.1.17 Cob(I)Alamin Adenosyltransferase
2.6.1 Transaminases
2.6.1.43 Aminolevulinate Transaminase
2.7.1 Phosphotransferases With An Alcohol Group As Acceptor
2.7.2.13 Glutamate 1-Kinase
2.7.7 Nucleotidyltransferases
2.7.8 Transferases For Other Substituted Phosphate Groups
3.1.1.14 Chlorophyllase
3.1.3 Phosphoric Monoester Hydrolases
3.2.1.31 Beta-Glucuronidase
4.1.1.37 Uroporphyrinogen Decarboxylase
4.2.1.24 Protoporphyrinogen Synthase
4.2.1.75 Uroporphyrinogen-III Synthase

Porphyrin And Chlorophyll II Metabolism Kit C

4.3.1.8 Hydroxymethylbilane Synthase
4.4.1.7 Holocytochrome-C Synthase
4.99.1 Other Lyases
4.99.1.1 Ferrochelatase
5.4.1.2 Precorrin-8X Methylmutase
5.4.3.8 Glutamate-1-Semialdehyde 2,1-Aminomutase
6.1.1.17 Glutamate--tRNA Ligase
6.3.1 Acid--Ammonia(or Amine) Ligases...

Metabolic Kit Catalog

Propanoate Metabolism Kit A

1,2,3-tricarboxylate
 (2S,3R)-3-Hydroxybutane-
 (S)-2-Methylmalate
 (S)-Methylmalonate Semialdehyde
 (S)-Methylmalonyl-CoA
 Methyl-malonyl-CoA
 1-Aminocyclopropane-1-Carboxylate
 2-Hydroxybutyrate
 2-Methylcitrate
 2-Oxo-butanoate
 2-Propanol
 2-Propyn-1-al
 2-Propyn-1-ol
 3-Hydroxy Propanoate
 3-Hydroxy-Propionyl-CoA
 3-Oxopropionyl-CoA
 Acetoacetyl-CoA
 Acetoactate
 Acetone
 Acetyl-CoA
 Acryloyl-CoA
 B-Alanine Metabolism
 B-Alanyl-CoA
 Lactate
 Lactoyl-CoA
 L-Valine
 Malonate Semialdehyde
 Malonyl-CoA
 Methylmalonate
 Propanoate
 Propionyl Phosphate
 Propionyladenylate
 Propionyl-CoA
 Propynoate
 S-Adenosyl-L-Methionine
 Succinate
 Succinyl-CoA
 1.1.1.21 Aldehyde Reductase
 1.1.1.27 L-Lactate Dehydrogenase
 1.1.1.28 D-Lactate Dehydrogenase
 1.1.1.37 Malate Dehydrogenase
 1.1.1.38 Malate Dehydrogenase ...
 1.1.1.39 Malate Dehydrogenase (decarboxylating)
 1.1.1.40 Malate Dehydrogenase...
 1.1.1.77 Lactaldehyde Reductase
 1.1.1.78 D-Lactaldehyde Dehydrogenase
 1.1.1.79 Glyoxylate Reductase (NADP+)
 1.1.1.82 Malate Dehydrogenase (NADP+)
 1.1.2.4 D-Lactate Dehydrogenase (Cytochrome)
 1.1.2.5 D-Lactate Dehydrogenase(Cytochrome C-553)
 1.1.3.3 Malate Oxidase
 1.1.99.16 Malate Dehydrogenase (Acceptor)
 1.1.99.7 Lactate--Malate Transhydrogenase
 1.13.12.4 Lactate 2-Monooxygenase
 1.2.1.1 Formaldehyde Dehydrogenase...
 1.2.1.10 Acetaldehyde Dehydrogenase....
 1.2.1.22 Lactaldehyde Dehydrogenase
 1.2.1.23 2-Oxoaldehyde Dehydrogenase (NAD+)
 1.2.1.3 Aldehyde Dehydrogenase (NAD+)
 1.2.1.49 2-Oxoaldehyde Dehydrogenase (NADP+)

Propanoate Metabolism Kit B

1.2.1.51 Pyruvate Dehydrogenase (NADP+)
 1.2.2.2 Pyruvate Dehydrogenase(Cytochrome)
 1.2.3.3 Pyruvate Oxidase
 1.2.3.6 Pyruvate Oxidase (CoA-Acetylating)
 1.2.4.1 Pyruvate Dehydrogenase (lipoamide)
 1.2.7.1 Pyruvate Synthase
 1.2.99.3 Aldehyde Dehydrogenase (Pyrroloquinoline-Quinone)
 1.2.99.6 Carboxylate Reductase
 1.8.1.4 Dihydrolipoamide Dehydrogenase
 2.3.1.12 Dihydrolipoamide S-Cetyltransferase
 2.3.1.54 Fromate C-Acetyltransferase
 2.3.1.8 Phosphate Acetyltransferase
 2.3.1.9 Acetyl-CoA C-Acetyltransferase
 2.7.1.40 Pyruvate Kinase
 2.7.2.1 Acetate Kinase
 2.7.2.12 Acetate Kinase Pyrophosphate)
 2.7.9.1 Pyruvate, Orthophosphate dikinase
 2.7.9.2 Pyruvate, Water Dikinase
 2.8.3.1 Propionate CoA-Transferase
 3.1.2.1 Acetyl-CoA Hydrolase
 3.1.2.6 Hydroxyacylglutathione Hydrolase
 3.6.1.7 Acylphosphatase
 4.1.1 Carboxy-Lyases
 4.1.1.3 Oxaloacetate Decarboxylase
 4.1.1.31 Phosphoenolpyruvate Carboxylase
 4.1.1.32 Phosphoenolpyruvate Carboxykinase(GTP)
 4.1.1.38 Phosphoenolpyruvate Carboxykinase
 4.1.1.49 Phosphoenolpyruvate Carboxykinase(ATP)
 4.1.2.36 Lactate Aldolase
 4.1.3 Oxo-Acid-Lyases
 4.1.3.12 2-Isopropylmalate Synthase
 4.1.3.2 Malate Synthase
 4.1.3.21 Homocitrate Synthase
 4.1.3.25 Citramalyl-CoA Lyase
 4.1.3.33 2-Ethylmalate Synthase
 4.2.1.72 Acetylenedicarboxylate Hydratase
 4.2.99.11 Methylglyoxal Synthase
 4.4.1.5 Lactoylglutathione Lyase
 5.1.2.1 Lactate Racemase
 6.2.1.1 Acetate--CoA Ligase
 6.2.1.13 Acetate--CoA Ligase (ADP-Forming)
 6.4.1.1 Pyruvate Carboxylase
 6.4.1.2 Acetyl-CoA Carboxylase

Metabolic Kit Catalog

Prostaglandin And Leukotriene Metabolism Kit

12-HPETE
 11-Dehydro-TXB2
 11-Epi-PGF2A
 12-13,14-Dihydro-PGJ2
 12-Keto-LTB4
 15-HPETE
 15-Keto-PGF2A
 20-COOH-LTB4
 20-OH-LTB4
 5-HPETE
 5-Keto-PGE1
 6-Keto-PGF1A
 Arachidonate
 Lecithin
 Lipoxin
 LTA4
 LTB4
 LTC4
 LTD4
 LTE4
 LTF4
 PGA2
 PGB2
 PGC2
 PGD2
 PGE2
 PGF2A
 PGG2
 PGH2
 PGJ2
 Prostacyclin
 TXA2
 TXB2
 1.1.1.184 Carbonyl Reductase(NADPH)
 1.1.1.188 Prostaglandin-F Synthase
 1.1.1.189 Prostaglandin-E2 9-Reductase
 1.1.1.196 15-Hydroxyprostaglandin-D Dehydrogenase(NADP+)
 1.13.11.31 Arachidonate 12-Lipoxygenase
 1.13.11.33 Arachidonate 15-Lipoxygenase
 1.13.11.34 Arachidonate 5-Lipoxygenase
 1.14.13.30 Leukotriene-B4 20-Monooxygenase
 1.14.99.1 Prostaglandin-Exdoperoxide Synthase
 2.3.2 Aminoacyltransferases
 2.3.2.2 Gamma-glutamyltransferase
 2.5.1.37 Leukotriene-C4 Synthase
 3.1.1.4 Phospholipase A2
 3.3.2.6 Leukotrien-A4 Hydrolase
 4.2.1.92 Hydroperoxide Dehydratase
 5.3.99.2 prostaglandin-D Synthase
 5.3.99.3 Prostaglandin-E Synthase
 5.3.99.4 Prostaglandin-I Synthase
 5.3.99.5 Thromboxane-A Synthase

Purine Metabolism Kit A

(S)-Allantoin
 Allantoin
 1-5'-Phospho.-5-Amino.(AIR)
 1-(5'-P)-5-Form.-4-Imid.Carbo.
 1-5'-Phos.-N-Formylglycine.
 2,3'-Cyclic AMP
 2,3'-Cyclic GMP
 3,5'-Cyclic AMP
 3,5'-Cyclic GMP
 3'-AMP
 3'-GMP
 3'-Phosphoadenylate
 3'-Phosphoadenylylsulfate
 5'-Acetylphos.(Mitochon.)
 5-Amino-4-Imid. Carboxy.
 5-Amino-4-Imid.
 5'-Benzoyl.(Mitochondria)
 5'-Butyryl.(Mitochondria)
 5-Imidazolone
 5'P-Ribosyl-4-(N-Succ.)-5-A
 5'P-Ribosyl-4-Carboxy-5-A
 5-Ureido-4-Imidazole Carbo.
 Adenine
 Adenosine
 Adenosine 5'-Tetraphosphate
 Adenylo-Succinate
 Adenylylsulfate
 ADP
 ADP(Extrace Lular)
 ADPribose
 AICAR
 Allantoate
 Aminoimidazole
 AMP
 ApppA
 AppppA
 ATP
 ATP(Extracellular)
 ATP(Lysosomal Matriz)
 Co2
 dADP
 dAMP
 dATP
 Deoxyadenosine
 Deoxyguanosine
 Deoxyinosine
 dGDP
 dGMP
 dGTP
 dIDP
 dIMP
 dITP
 DNA
 D-Ribose-1P
 FGAM
 Formiminoglycine
 GAR
 GDP
 Glycine
 Glyoxalate

Metabolic Kit Catalog

Purine Metabolism Kit B

GMP
 GppppG
 GTP
 GTP(Extracellular)
 Guanine
 Guanosine
 Hypoxanthine
 IDP
 IMP
 Inosine
 Inosine 5'-Tetraphosphate
 ITP
 ITP(Extracellular)
 L-Glutamine
 NH₃
 ppGpp
 pppGpp
 PRPP
 Ribose-5P
 Ribosylamine-5P
 RNA
 Sulfate
 Urate
 Urate-3-Ribonucleoside
 Urea
 Urendo-Glycolate
 Xanthine
 Xanthosine
 XMP
 XppppX
 XTP
 1.1.1.204 Xanthine Dehydrogenase
 1.1.1.205 IMP Dehydrogenase
 1.1.3.22 Xanthine Oxidase
 1.6.6.8 GMP Reductase
 1.7.3.3 Urate Oxidase
 1.17.4.1 Ribonucleoside-Diphosphate Reductase
 1.17.4.2 Ribonucleoside-Triphosphate Reductase
 2.1.2.2 Phosphoribosylglycinamide Formyltransferase
 2.1.2.3 Phosphoribosylaminoimidazolecarboxamide Formyltransferase
 2.1.2.4 Glycine Formiminotransferase
 2.4.2.1 Purine-Nucleoside Phosphorylase
 2.4.2.2 Pyrimidine-Nucleoside Phosphorylase
 2.4.2.4 Thymidine Phosphorylase
 2.4.2.7 Adenine Phosphoribosyltransferase
 2.4.2.8 Hypoxanthine Phosphoribosyltransferase
 2.4.2.14 Amidophosphoribosyltransferase
 2.4.2.15 Guanosine Phosphorylase
 2.4.2.16 Urate-Ribonucleotide Phosphorylase
 2.4.2.22 Xanthine Phosphoribosyltransferase
 2.7.1.20 Adenine Kinase
 2.7.1.25 Adenylylsulfate Kinase
 2.7.1.40 Pyruvate Kinase
 2.7.1.73 Inosine Kinase
 2.7.1.74 Deoxycytidine Kinase
 2.7.1.76 Deoxyadenosine Kinase
 2.7.1.113 Deoxyguanosine Kinase
 2.7.4.3 Adenylate Kinase
 2.7.4.6 Nucleoside-Diphosphate Kinase
 2.7.4.8 Guanylate Kinase

Purine Metabolism Kit C

2.7.4.10 (Deoxy)Adenylate Kinase
 2.7.6.1 Ribose-Phosphate Pyrophosphokinase
 2.7.6.5 GTP Pyrophosphokinase
 2.7.7.4 Sulfate Adenylyltransferase
 2.7.7.6 DNA-Directed RNA Polymerase
 2.7.7.7 DNA-Directed DNA Polymerase
 2.7.7.8 Polyribonucleotide Nucleotidyltransferase
 2.7.7.48 RNA-Directed RNA Polymerase
 2.7.7.53 ATP Adenylyltransferase
 3.1.3.5 5'-Nucleotidase
 3.1.3.6 3'-Nucleotidase
 3.1.4.16 2',3'-Cyclic-Nucleotide 2'-Phosphodiesterase
 3.1.4.17 3',5'-Cyclic-Nucleotide Phosphodiesterase
 3.1.5.1 dGTPase
 3.1.7.2 Guanosine-3',5'-Bis(Diphosphate) 3'-Pyrophosphatase
 3.2.2.1 Purine Nucleosidase
 3.2.2.2 Inosine Nucleosidase
 3.2.2.4 AMP Nucleosidase
 3.2.2.7 Adenosine Nucleosidase
 3.2.2.8 Ribosylpyrimidine Nucleosidase
 3.2.2.12 Inosinate Nucleosidase
 3.5.1.5 Urease
 3.5.2 In Cyclic Amides
 3.5.2.5 Allantoinase
 3.5.3 In Linear Amidines
 3.5.3.4 Allantoicase
 3.5.3.19 Ureidoglycolate Hydrolase
 3.5.4.2 Adenine Deaminase
 3.5.4.3 Guanine Deaminase
 3.5.4.4 Adenosine Deaminase
 3.5.4.6 AMP Deaminase
 3.5.4.8 Aminoimidazolase
 3.5.4.10 IMP Cyclohydrolase
 3.6.1.3 Adenosinetriphosphatase
 3.6.1.5 Apyrase
 3.6.1.6 Nucleoside-Diphosphatase
 3.6.1.8 ATP Pyrophosphatase
 3.6.1.9 Nucleotide Pyrophosphatase
 3.6.1.11 Exopolyphosphatase
 3.6.1.13 ADPribose Pyrophosphatase
 3.6.1.14 Adenosine-Tetraphosphatase
 3.6.1.15 Nucleoside-Triphosphatase
 3.6.1.17 Bis(5'-Nucleosyl)-Tetraphosphatase
 3.6.1.19 Nucleoside-Triphosphate Pyrophosphatase
 3.6.1.20 5'-Acylphosphoadenosine Hydrolase
 3.6.1.21 ADPsugar Pyrophosphatase
 3.6.1.29 Bis(5'-Adenosyl)-Triphosphatase
 3.6.1.32 Myosin ATPase
 3.6.1.40 Guanosine-5'-Triphosphate,3'-Diphosphate Pyrophosphatase
 3.6.1.41 Bis(5'-Nucleosyl)-Tetraphosphatase(Symmetrical)
 4.1.1 Carboxy-Lyases
 4.1.1.21 Phosphoribosylaminoimidazole Carboxylase
 4.3.2.2 Adenylylsuccinate Lyase
 4.3.2.3 Ureidoglycolate Lyase
 4.6.1.1 Adenylate Cyclase
 4.6.1.2 Guanylate Cyclase
 5.1.99.3 Allantoin Racemase
 5.4.2.7 Phosphopentomutase
 6.3.2.6 Phosphoribosylaminoimidazolesuccinocarboxamide Synthase
 6.3.3.1 Phosphoribosylformylglycinamide Cyclo-Ligase

Metabolic Kit Catalog

Purine Metabolism Kit D

6.3.4.1 GMP Synthase
6.3.4.4 Adenylosuccinate Synthase
6.3.4.7 Ribose-5-Phosphate--Ammonia Ligase
6.3.4.13 Phosphoribosylamine--Glycine Ligase
6.3.5.2 GMP Synthase (Glutamine-Hydrolysing)
6.3.5.3 Phosphoribosylformylglycinamide Synthase

Pyrimidine Metabolism Kit A

2',3'-Cyclic CMP
2',3'-Cyclic UMP
2'-Deoxy-5-Hydroxy-Methylcytidine-5'-P
2-Deoxy-D-Ribose-1P
3-Amino-Isobutnoate
3'-CMP
3'-UMP
3-Ureido-Isobutyrate
3-Ureido-Propionate
5-Methyl-Barbiturate
5-Methylcytosine
B-Alanine
Barbiturate
Carbamoyl-P
CDP
CMP
CTP
CTP(Extrace Llular)
Cytidine
Cytosine
dCDP
dCMP
dCTP
Deoxy-Cytidine
Deoxyuridine
Dihydroorotate
Dihydro-Thymine
Dihydrouracil
Diphosphate
DNA
dTDP
dTMP
dTTP
dUDP
dUMP
dUTP
L-Glutamine
Malonate Urea
Methylmalonate
N-Carbamoyl-L-Aspartate
Orotate
Orotidine-5P
Oxd.-Thioredoxin
PRPP
Pseudouridine
Pseudouridine 5'-Phosphate
Red.Thioredoxin
RNA
Thymidine
Thymine
Trimetaphosphate
Triphospate
UDP
UDPGlucose(Extrace Llular)
UMP
UppppU
Uracil
Uridine
UTP
UTP(Extrace Llular)

Metabolic Kit Catalog

Pyrimidine Metabolism Kit B

1.1.99.19 Uracil Dehydrogenase
 1.3.1.1 Dihydrouracil Dehydrogenase (NAD+)
 1.3.1.2 Dihydropyrimidine Dehydrogenase (NADP+)
 1.3.1.14 Orotate Reductase (NADH)
 1.3.3.1 Dihydroorotate Oxidase
 1.3.99.11 Dihydroorotate Dehydrogenase
 1.6.4.5 Thioredoxin Reductase (NADPH)
 1.17.4.1 Ribonucleoside-Diphosphate Reductase
 1.17.4.2 Ribonucleoside-Triphosphate Reductase
 2.1.1.45 Thymidylate Synthase
 2.1.2.8 Deoxycytidylate 5-Hydroxymethyltransferase
 2.1.3.2 Aspartate Carbamoyltransferase
 2.4.2.1 Purine-Nucleoside Phosphorylase
 2.4.2.2 Pyrimidine-Nucleoside Phosphorylase
 2.4.2.3 Uridine Phosphorylase
 2.4.2.4 Thymidine Phosphorylase
 2.4.2.6 Nucleoside Dextroribosyltransferase
 2.4.2.9 Uracil Phosphoribosyltransferase
 2.4.2.10 Orotate Phosphoribosyltransferase
 2.4.2.23 Deoxyuridine Phosphorylase
 2.7.1.21 Thymidine Kinase
 2.7.1.48 Uridine Kinase
 2.7.1.74 Deoxycytidine Kinase
 2.7.1.83 Pseudouridine Kinase
 2.7.4.4 Nucleoside-Phosphate Kinase
 2.7.4.6 Nucleoside-Diphosphate Kinase
 2.7.4.9 dTMP Kinase
 2.7.4.10 Nucleoside-Triphosphate--Adenylate Kinase
 2.7.4.14 Cytidylate Kinase
 2.7.7.6 DNA-Directed RNA Polymerase
 2.7.7.7 DNA-Directed DNA Polymerase
 2.7.7.8 Polyribonucleotide Nucleotidyltransferase
 3.1.3.5 5'-Nucleotidase
 3.1.3.6 3'-Nucleotidase
 3.1.4.16 2',3'-Cyclic-Nucleotide 2'-Phosphodiesterase
 3.2.2.3 Uridine Nucleosidase
 3.2.2.8 Ribosylpyrimidine Nucleosidase
 3.2.2.10 Pyrimidine-5'-Nucleotide Nucleosidase
 3.5.1.6 Beta-Ureidoopropionase
 3.5.2.1 Barbiturase
 3.5.2.2 Dihydropyrimidinase
 3.5.2.3 Dihydroorotase
 3.5.4.1 Cytosine Deaminase
 3.5.4.5 Cytidine Deaminase
 3.5.4.12 dCMP Deaminase
 3.5.4.13 dCTP Deaminase
 3.5.4.14 Deoxycytidine Deaminase
 3.6.1.2 Trimetaphosphatase
 3.6.1.5 Apyrase
 3.6.1.6 Nucleoside-Diphosphatase
 3.6.1.8 ATP Pyrophosphatase
 3.6.1.12 dCTP Pyrophosphatase
 3.6.1.17 Bis(5'-Nucleosyl)-Tetraphosphatase(Asymmetrical)
 3.6.1.19 Nucleoside-Triphosphate Pyrophosphatase
 3.6.1.23 dUTP Pyrophosphatase
 3.6.1.39 Thymidine-Triphosphatase
 4.1.1.23 Orotidine-5'-Phosphate Decarboxylase
 4.2.1.70 Pseudouridylate Synthase
 6.3.4.2 CTP Synthase
 6.3.5.5 Carbamoyl-Phosphate Synthase(Glutamine-Hydrolysing)

Pyruvate Metabolism Kit A

2-Ethylmalate
 S-Lactoylglutathione
 2-Hydroxyethylene-Dicarboxylate
 2-Propylmalate
 3-Carboxy-3-Hydroxy-4-Methylpentanoate
 Acetaldehyde
 Acetate
 Acetoacetyl-CoA
 Acetyl Adenylate
 Acetyl-CoA
 Acetylene-Dicarboxylate
 Acetyl-P
 Citramalyl-CoA
 D-Lactaldehyde
 D-Lactate
 Formate
 Glycerone-P
 Homocitrate
 Lactaldehyde
 L-Lactaldehyde
 L-Lactate
 L-Malate
 Malonyl-CoA
 Methylglyoxal
 Oxaloacetate
 Phosphoenol-Pyruvate
 Propane-1,2-Diol
 Pyruvate
 1.1.1.21 Aldehyde Reductase
 1.1.1.27 L-Lactate Dehydrogenase
 1.1.1.28 D-Lactate Dehydrogenase
 1.1.1.37 Malate Dehydrogenase
 1.1.1.38 Malate Dehydrogenase (Oxaloacetate-Decarboxylating)
 1.1.1.39 Malate Dehydrogenase (Decarboxylating)
 1.1.1.40 Malate Dehydrogenase (Oxaloacetate Decarboxylating)
 1.1.1.77 Lactaldehyde Reductase
 1.1.1.78 D-Lactaldehyde Dehydrogenase
 1.1.1.79 Glyoxylate Reductase (NADP+)
 1.1.1.82 Malate Dehydrogenase (NADP+)
 1.1.2.4 D-Lactate Dehydrogenase (Cytochrome)
 1.1.2.5 D-Lactate Dehydrogenase(Cytochrome C-553)
 1.1.3.3 Malate Oxidase
 1.1.99.16 Malate Dehydrogenase (Acceptor)
 1.1.99.7 Lactate--Malate Transhydrogenase
 1.13.12.4 Lactate 2-Monoxygenase
 1.2.1.1 Formaldehyde Dehydrogenase (Glutathione)
 1.2.1.10 Acetaldehyde Dehydrogenase(Acetyllating)
 1.2.1.22 Lactaldehyde Dehydrogenase
 1.2.1.23 2-Oxoaldehyde Dehydrogenase (NAD+)
 1.2.1.3 Aldehyde Dehydrogenase (NAD+)
 1.2.1.49 2-Oxoaldehyde Dehydrogenase (NADP+)
 1.2.1.51 Pyruvate Dehydrogenase (NADP+)
 1.2.2.2 Pyruvate Dehydrogenase(Cytochrome)
 1.2.3.3 Pyruvate Oxidase
 1.2.3.6 Pyruvate Oxidase (CoA-Acetyllating)
 1.2.4.1 Pyruvate Dehydrogenase (lipoamide)
 1.2.7.1 Pyruvate Synthase
 1.2.99.3 Aldehyde Dehydrogenase
 1.2.99.6 Carboxylate Reductase
 1.8.1.4 Dihydropyruvate Dehydrogenase

Metabolic Kit Catalog

Pyruvate Metabolism Kit B

2.3.1.12 Dihydroliipoamide S-Cetyltransferase
2.3.1.54 Fromate C-Acetyltransferase
2.3.1.8 Phosphate Acetyltransferase
2.3.1.9 Acetyl-CoA C-Acetyltransferase
2.7.1.40 Pyruvate Kinase
2.7.2.1 Acetate Kinase
2.7.2.12 Acetate Kinase Pyrophosphate)
2.7.9.1 Pyruvate, Orthophosphate dikinase
2.7.9.2 Pyruvate, Water Dikinase
2.8.3.1 Propionate CoA-Transferase
3.1.2.1 Acetyl-CoA Hydrolase
3.1.2.6 Hydroxyacylglutathione Hydrolase
3.6.1.7 Acylphosphatase
4.1.1 Carboxy-Lyases
4.1.1.3 Oxaloacetate Decarboxylase
4.1.1.31 Phosphoenolpyruvate Carboxylase
4.1.1.32 Phosphoenolpyruvate Carboxykinase(GTP)
4.1.1.38 Phosphoenolpyruvate Carboxykinase
4.1.1.49 Phosphoenolpyruvate Carboxykinase(ATP)
4.1.2.36 Lactate Aldolase
4.1.3 Oxo-Acid-Lyases
4.1.3.12 2-Isopropylmalate Synthase
4.1.3.2 Malate Synthase
4.1.3.21 Homocitrate Synthase
4.1.3.25 Citramalyl-CoA Lyase
4.1.3.33 2-Ethylmalate Synthase
4.2.1.72 Acetylenedicarboxylate Hydratase
4.2.99.11 Methylglyoxal Synthase
4.4.1.5 Lactoylglutathione Lyase
5.1.2.1 Lactate Racemase
6.2.1.1 Acetate--CoA Ligase
6.2.1.13 Acetate--CoA Ligase (ADP-Forming)
6.4.1.1 Pyruvate Carboxylase
6.4.1.2 Acetyl-CoA Carboxylase

Reductive Carboxylate Cycle(CO2 Fixation)

2-Oxoglutarate
Acetate
Acetyl-CoA
Cis-Aconitate
Citrate
Co2
Fumarate
Isocitrate
L-Alanine
L-Malate
Oxaloacetate
Phosphoenol-Pyruvate
Pyruvate
Reduced Ferredoxin
Succinate
Succinyl-CoA
1.1.1.37 Malate Dehydrogenase
1.2.7.1 Pyruvate Synthase
1.2.7.3 2-Oxoglutarate Synthase
1.4.1.1 Alanine Dehydrogenase
2.7.9.2 Pyruvate, Water Dikinase
4.1.1.31 Phosphoenolpyruvate Carboxylase
4.1.3.6 Citrate Lyase
4.2.1.2 Fumarate Hydratase
4.2.1.3 Aconitate Hydratase
6.2.1.1 Acetate--CoA Ligase
6.2.1.5 Succinate--CoA Ligase(ADP-Forming)

Retinol Metabolism Kit

11-Cis-Dehydroretinal
11-Cis-Retinal
11-Cis-Retinol
11-Cis-Retiny Palmitate
All-Trans-Dehydroretinal
All-trans-Retinal
All-Trans-Retinoate
All-Trans-Retinol (Vit.A)
All-Trans-Retiny Ester
Bathorhodopsin
B-Carotene
B-Glucuronide
Iodopsin
Lumirhodopsin
Metarhodopsin
Porphyropsin
Retinyl Palmitate
Rhodopsin
1.1.1.105
1.2.1.36
1.2.3.11
1.13.11.21
2.3.1.76
3.1.1.21
3.1.1.63
3.1.1.64
5.2.1.3
5.2.1.7
Inositol Metabolism Kit
2-De.-5-Ke.-D-Glu. Acid
2-De.-5-Ke.-D-Glu. Ac.-6P
Acetyl-CoA
D-2,3-Dik.-4-Deo.-Epi-Ino.
Dihydroxyacetone Phos.
Glyceraldehyde-3P
IoIB
IoIC
IoID
IoIE
Malonic Semialdehyde
Myo-Inositol
Scyllo-Inosose
1.1.1.18
1.2.1.18
1.2.1.27
4.1.2.13
5.3.1.1

Metabolic Kit Catalog

Riboflavin Metabolism Kit

GTP
2,5-Diamino-6-Hydroxy-4-(5'-Phosphoribosylamino)-Pyrimidine
4-Ribitylamino-5-Aminouracil
5-Amino-6-(5'Phosphoribitylamino)Uracil
5-Amino-6-(5'-Phosphoriboylamino)Uracil
6,7-Dimethyl-8-Ribityl Lumazine
7-Hydroxy-6-Methyl-8-Ribityl Lumazine
Dimethylbenzimidazole
FAD
FMN
H2O
Hydroquinone
Lumichrome
N1-(5-Phospho-Alpha-D-Ribosyl)-5,6-Dimethylbenzimidazole
N1-(Alpha-D-Ribosyl)-5,6-Dimethylbenzimidazole
O2
Quinone
Ribitol
Riboflavin
1.1.1.193 5-Amino-6-(5-Phosphoribosylamino)Uracil Reductase
1.14.18.1 Monophenol Monooxygenase
2.4.2.21 Nicotinate-Nucleotide--Dimethylbenzimidazole
2.5.1.9 Riboflavin Synthase
2.7.1.26 Riboflavin Kinase
2.7.7.2 FMN Adenylyltransferase
3.1.3 Phosphoric Monoester Hydrolases
3.1.3.2 Acid Phosphatase
3.5.4.25 GTP Cyclohydrolase II
3.5.4.26 Diaminohydroxyphosphoriboylaminopyrimidine Deaminase
3.5.99.1 Riboflavinase
3.6.1.9 Nucleotide Pyrophosphatase
3.6.1.18 FAD Pyrophosphatase

Selenoamino Acid Metabolism Kit

3'-Phosphoadenylylselenate
Acetate
Adenylylselenate
Hydrogen Selenide
L-Alanine
L-Selenocysteinyl-tRNA(Ser)
L-Seryl-tRNA(Ser)
Methaneselenol
O-Acetyl-L-Serine
Protein
Proteins
Se
Se-Adenosyl-Selenohomocysteine
Se-Adenosyl-Selenomethionine
Selenate
Selenite
Selenocystathionine
Selenocysteine
Selenocysteine Selenate
Selenocystine
Selenohomocysteine
Selenohomocystine
Selenomethionine
Selenomethionine Se-Oxide
Selenomethionyl-tRNA
Selenophosphate
Se-Methyl-Selenocysteine
Se-Methylselenomethionine
Se-Propylseleno-Cysteine-Oxide
Y-Glutamyl-Se-Methylselenocysteine
1.8.1.2 Sulfite Reductase (NADPH)
1.8.7.1 Sulfite Reductase (Ferredoxin)
1.8.99.1 Sulfite Reductase
1.8.99.2 Adenylylsulfate Reductase
2.1.1 Methyltransferases
2.1.1.9 Thiol S-Methyltransferase
2.1.1.12 Methionine S-Methyltransferase
2.3.2.2 Gamma-Glutamyltransferase
2.5.1.6 Methionine Adenosyltransferase
2.7.1.5 Adenylylsulfate Kinase
2.7.7.4 Sulfate Adenylyltransferase
2.7.9.3 Selenide, Water Dikinase
2.9.1.1 L-Seryl-tRNA(Ser) Seleniumtransferase
3.3.1.1 Adenosylhomocysteinase
4.2.1.22 Cystathionine Beta-Synthase
4.2.99.8 Cysteine Synthase
4.2.99.9 O-Succinylhomoserine (Thiol)-Lyase
4.4.1.1 Cystathionine Gamma-Lyase
4.4.1.8 Cystathionine Beta-Lyase
4.4.1.11 Methionine Gamma-Lyase
4.4.1.16 Selenocysteine Lyase
6.1.1.10 Methionine--tRNA Ligase

Metabolic Kit Catalog

Sphingophospholipid Biosynthesis Kit

Ceramide Ciliatine
 Ceramide Phosphoethanolamine
 Ceramide-P
 CMPciliatine
 N-Acylsphingosine(Ceramide)
 Sphingomyelin
 Sphingosine
 Sphingosylphosphocholine
 2.3.1.24 Sphingosine N-Acyltransferase
 2.7.1.138 Ceramide Kinase
 2.7.8 Transferases For Other Substituted Phosphate Groups
 2.7.8.1 Ethanolaminephosphotransferase
 2.7.8.3 Ceramide Cholinephosphotranferase
 2.7.8.10 Sphingosine Cholinephosphotransferase
 3.1.4.12 Sphingomyelin Phosphodiesterase
 3.1.4.41 Sphingomyelin Phosphodiesterase D

Sphingoglycolipid Metabolism Kit

Ceramide Ciliatine
 Ceramide Phosphoethanolamine
 Ceramide-P
 CMPciliatine
 N-Acylsphingosine(Ceramide)
 Sphingomyelin
 Sphingosine
 Sphingosylphosphocholine
 2.3.1.24 Sphingosine N-Acyltransferase
 2.7.1.138 Ceramide Kinase
 2.7.8 Transferases For Other Substituted Phosphate Groups
 2.7.8.1 Ethanolaminephosphotransferase
 2.7.8.3 Ceramide Cholinephosphotranferase
 2.7.8.10 Sphingosine Cholinephosphotransferase
 3.1.4.12 Sphingomyelin Phosphodiesterase
 3.1.4.41 Sphingomyelin Phosphodiesterase D

Starch And Sucrose Metabolism Kit A

(2,6-Beta-D-Frucosyl)M+N
 (2,6-Beta-D-Frucosyl)N
 1,3-B-Glucan
 1,4-B-D-Glucan
 1,4-B-D-Xylan
 3-Ketosucrose
 A,A-Trehalose
 A,A-Trehalose(Extrace Llular)
 A,A-Trehalose-6P
 A-D-Glucose
 A-D-Glucose-1,6P2
 A-D-Glucose-1P
 A-D-Glucose-6P
 ADP-Glucose
 B-D-Fructose
 B-D-Fructose-6P
 B-D-Glucose
 B-D-Glucose-1P
 B-D-Glucose-6P
 B-D-Glucuronide
 CDP-4-Oxo-3,6-Dide.-D-Gl.
 CDP-4-Oxo-6-Deoxy-D-Glu.
 CDP-Glucose
 CDPparatose
 CDPtyvelose
 Cellobiose
 Celloheptaose
 Cellohexaose
 Cellopentaose
 Cellotetraose
 Cellotriose
 Cellulose
 Cyclo-Maltodextrine
 Dextrin
 D-Fructose
 D-Galacturonate
 D-Glucose
 D-Glucuronate
 D-Xylose
 GDP-Glucose
 Glucoside
 Glycegen;Amylose
 Isomaltose
 Isomaltose(Extrace Llular)
 Maltodextrin
 Maltose
 Maltose(Extrace Llular)
 Maltose-6P
 Pectate
 Pectin
 Starch:Glycogen
 Sucrose
 Sucrose(Extrace Llular)
 Sucrose-6P
 UDP-D-Galacturonate
 UDP-D-Glucuronate
 UDP-D-Xylose
 UDP-Glucose
 1.1.1.22 UDPGlucose 6-Dehydrogenase
 1.1.99.13 Glucoside 3-Dehydrogenase

Metabolic Kit Catalog

Starch And Sucrose Metabolism Kit B

1.17.1.1 CDP-4-Dehydro-6-Deoxyglucose Reductase
2.4.1.1 Phosphorylase
2.4.1.4 Amylosucrase
2.4.1.5 Dextranucrase
2.4.1.7 Sucrose Phosphorylase
2.4.1.8 Maltose Phosphorylase
2.4.1.10 Levansucrase
2.4.1.11 Glycogen(Starch)Synthase
2.4.1.12 Cellulose Synthase (UDP-Forming)
2.4.1.13 Sucrose Synthase
2.4.1.14 Sucrose-Phosphate Synthase
2.4.1.15 Alpha, Alpha-Trehalose-Phosphate Synthase(UDP-Form.)
2.4.1.17 Glucuronosyltransferase
2.4.1.18 1,4-Alpha-Glucan Branching Enzyme
2.4.1.20 Cellobiose Phosphorylase
2.4.1.21 Starch Synthase
2.4.1.25 4-Alpha-Glucanotransferase
2.4.1.29 Cellulose Synthase (GDP-Forming)
2.4.1.34 1,3-Beta-Glucan Synthase
2.4.1.35 Phenol Beta-Glucosyltransferase
2.4.1.43 Polygalacturonate 4-Alpha-Galacturonosyltransferase
2.4.1.64 Alpha, Alpha-Trehalose Phosphorylase
2.4.2.24 1,4-Beta-D-Xylan Synthase
2.7.1 Phosphotransferases With An Alcohol Group As Acceptor
2.7.1.1 Hexokinase
2.7.1.2 Glucokinase
2.7.1.4 Fructokinase
2.7.1.10 Phosphoglucokinase
2.7.1.41 Glucose-1-Phosphate Phosphodismutase
2.7.1.69 Protein-N(Pai)-Phosphohistidine...
2.7.1.106 Glucose-1,6-Bisphosphate Synthase
2.7.7.9 UTP--Glucose-1-Phosphate Uridyltransferase
2.7.7.27 Glucose-1-Phosphate Adenylyltransferase
2.7.7.33 Glucose-1-Phosphate Cytidylyltransferase
2.7.7.34 Glucose-1-Phosphate Guanylyltransferase
3.1.1.11 Pectinesterase
3.1.3.9 Glucose-6-Phosphatase
3.1.3.12 Trehalose-Phosphatase
3.1.3.24 Sucrose-Phosphatase
3.2.1.1 Alpha-Amylase
3.2.1.2 Beta-Amylase
3.2.1.3 Glucan 1,4-Alpha-Glucosidase
3.2.1.4 Cellulase
3.2.1.10 Oligo-1,6-Glucosidase
3.2.1.15 Polygalacturonase
3.2.1.20 Alpha-Glucosidase
3.2.1.21 Beta-Glucosidase
3.2.1.26 Beta-Fructofuranosidase
3.2.1.28 Alpha, Alpha-Trehalase
3.2.1.31 Beta-Glucuronidase
3.2.1.33 Amylo-1, 6-Glucosidase
3.2.1.37 Xylan 1,4-Beta-Xylosidase
3.2.1.39 Glucan Endo-1, 3-Beta-D-Glucosidase
3.2.1.48 Sucrose Alpha-Glucosidase
3.2.1.54 Cyclomaltodextrinase
3.2.1.58 Glucan 1, 3-Beta-Glucosidase
3.2.1.65 Levanase
3.2.1.67 Galcturan 1, 4-Alpha-Galacturonidase
3.2.1.74 Glucan 1,4-Beta-Glucosidase
3.2.1.91 Cellulose 1,4-Beta-Cellobiosidase

Starch And Sucrose Metabolism Kit C

3.2.1.93 Alpha, Alpha-Phosphotrehalase
3.2.1.122 Maltose-6'-Phosphate Glucosidase
3.6.1 In Phosphorus-Containing Anhydrides
3.6.1.9 Nucleotide Pyrophosphatase
3.6.1.21 ADPsugar Pyrophosphatase
4.1.1.35 UDPglucuronate Decarboxylase
4.2.1.45 CDPglucose 4,6-Dehydratase
5.1.3.6 UDPglucuronate 4-Epimerase
5.1.3.10 CDPabequose Epimerase
5.3.1.9 Glucose-6-Phosphate Isomerase
5.4.2.2 Phosphoglucomutase
5.4.2.6 Beta-Phosphoglucomutase

Metabolic Kit Catalog

Streptomycin Biosynthesis Kit

1-Amino-1-Deoxy-Scyllo-Inositol
1-Amino-1-Deoxy-Scyllo-Inositol-4P
1-Guanidino-1-Deoxy-Scyllo-Inositol-4P
D-Glucose
D-Glucose-1P
D-Glucose-6P
Dihydrostreptomycin-6P
dTDP-4-Oxo-6-Deoxy-D-Glucose
dTDP-4-Oxo-L-Rhamnose
dTDP-Glucose
dTDP-L-Dihydro-Streptose
dTDP-L-Rhamnose
Myo-Inositol
Myo-Inositol-1P
NDP-N-Methyl-L-Glucosamine
O-1,4-a-L-Dihydro-Streptosyl-Streptidine-6P
Streptidine-6P
Streptomycin
Streptomycin-6P
2.7.1.65 Scyllo-Inosamine Kinase
3.1.3.25 Myo-Inositol-1(Or 4)-Monophosphatase
5.4.2.2 Phosphoglucomutase
5.5.1.4 Myo-Inositol-1-Phosphate Synthase

Beta-Lactam Resistance Kit

Beta-Lactam
Beta-Lactamase
DNA
Penicillin-Binding Protein

Erythromycin Biosynthesis Kit

2-Methylmalonyl-CoA
3-O-Mycarosylerythronolide B
6-Deoxyerythronolide B
D-Glucose
D-Glucose-1P
D-Glucose-6P
dTDP-3,4-Dioxy-2,6-Dideoxy-D-Glucose
dTDP-3-Amino-3,4,6-Trideoxy-D-Glucose
dTDP-3-Oxo-4,6-Dideoxy-D-Glucose
dTDP-3-Oxo-6-Deoxy-D-Glucose
dTDP-4-Oxo-2,6-Dideoxy-D-Glucose
dTDP-4-Oxo-2,6-Dideoxy-L-Glucose
dTDP-4-Oxo-3-Methyl-2,6-Dideoxy-L-Glucose
dTDP-4-Oxo-6-Deoxy-D-Glucose
dTDP-D-Desosamine
dTDP-Glucose
dTDP-L-Mycarose
Erythromycin A
Erythromycin B
Erythromycin C
Erythromycin D
Erythromycin E
Erythronolide B
Proionyl-CoA
2.7.1.1 Hexokinase
2.7.1.2 Glucokinase
2.7.7.24 Glucose-1-Phosphate Thymidyltransferase
4.2.1.46 dTDPglucose 4,6-Dehydratase
5.4.2.2 Phosphoglucomutase

Sterol Biosynthesis Kit A

(S)-Squalene-2,3-Epoxyde
14-Desmethyl-Lanosterol
24,25-Dihydro Lanosterol
3B,5A,6B-Cholestanetriol
3-Hydroxy-3-Methylglutaryl-CoA
4-A-Methylcholesta-8-En-3 B-ol
5,6B-Epoxy-5A-Cholestane
5,6B-Epoxy-5B-Cholestane
5A-Cholestane-5,6B-Diol
5-Carotene
5-Cholestene
7-Dehydro-Cholesterol
7-Dehydro-Desmosterol
A-Carotene
All-Tras-Geranylgeranyl-PP
B-Carotene
B-Zeacarotene
Calcidiol
Calcitriol
Chlorophylls
Cholesta-7,24-Dien-3 B-ol
Cholesterol
Cholesterol-5A,6, B-Epoxyde
Cholesterol-5B, 6B-Epoxyde
Coenzyme Q
Cycloartenol
Desmosterol
Dimethylallyl-PP
Ergosta-5,7,22,24,(28)-Tetraen-3 B-ol
Ergosterol
Farnesyl-PP
Geranyl-PP
Isopentenyl-PP
Lathosterol
Leanosterol
Lycopene
Mestanol
Mevalonate
Mevalonate-5P
Mevalonate-5PP
Neurosporene
Phytoene
Phytofluene
Phytosterol
Phytyl-PP
Prephytoene-PP
Presqualene-PP
Reduced Vitamin K
Rubber
Squalene
T-Carotene
Vitamin D2
Vitamin D3
Vitamin E
Vitamin K
Vitamin K Epoxide
Zymosterol
1.1.1.34 Hydroxymethylglutaryl-CoA Reductase (NADPH)
1.1.4.1 Vitamin-K-Epoxyde Reductase (Warfarin-Sensitive)
1.3.1.21 7-Dehydrocholesterol Reductase

Metabolic Kit Catalog

Sterol Biosynthesis Kit B

1.3.3.2 Lathosterol Oxidase
1.3.99 With Other Acceptors
1.6.99.2 NAD(P)H Dehydrogenase (Quinone)
1.14.13 With NADH or NADPH as One Donor
1.14.13.13 Calcidiol 1-Monooxygenase
1.14.15 With a Reduced Iron...
1.14.99.7 Squalene monooxygenase
1.14.199.30 Carotene 7,8-Desaturase
2.5.1.1 Dimethylallyltransferase
2.5.1.10 Geranyltransferase
2.5.1.20 Rubber Cis-Polyprenyltransferase
2.5.1.21 Farnesyl-Diphosphate Farnesyltransferase
2.5.1.29 Farnesyltransferase
2.5.1.32 Geranylgeranyl-Diphosphate Geranylgeranyltransferase
2.7.1.36 Mevalonate Kinase
2.7.4.2 Phosphomevalonate Kinase
3.3.2 Ether Hydrolases
4.1.1.33 Diphosphomevalonate Decarboxylase
5.3.3.2 Isopentenyl-Diphosphate Delta-Isomerase
5.3.3.5 Cholesterol Delta-Isomerase
5.4.99.7 Lanosterol Synthase
5.4.99.8 Cycloartenol Synthase

Styrene Degradation Kit

2-Hydroxy-6-Oxo-octa-2,4,7-Trienoate
2-hydroxypenta-2,4-Dienoate
2-Hydroxyphenylacetate
3-Vinylcatechol
4-Hydroxy-2-Oxovalerate
4-Maleylacetoacetate
Acetaldehyde
Acetoacetate
Acrylamide
Acrylate
Acrylonitrile
Acrylyl-CoA
Fumarate
Fumarylacetoacetate
Homogentisate
Lactoyl-CoA
L-Lactate
Phenylacetaldehyde
Phenylacetic Acid
Pyruvate
Styrene
Styrene Cis-Glycol
Styrene Oxide
1.2.1.39 Phenylacetaldehyde Dehydrogenase
1.3.1.19 Cis-1,2-Dihydrobenzene-1,2-Diol Dehydrogenase
1.13.11 With Incorporation Of Two Atoms Of Oxygen
1.13.11.2 Catechol 2,3-Dioxygenase
1.13.11.5 Homogentisate 1, 2-Dioxygenase
1.14.13 With NADH Or NADPH As One Donor...
2.8.3.1 Propionate CoA-Transferase
2.8.3.12 Glutaconate CoA-Transferase
3.5.1.4 Amidase
3.5.4.27 Methenyltetrahydromethanopterin Cyclohydrolase
3.5.5.7 Aliphatic Nitrilase
3.7.1.2 Fumarylacetoacetase
3.7.1.9 2-Hydroxymuconate-Semialdehyde Hydrolase
4.1.2 Aldehyde-Lyases
4.2.1.54 Lactoyl-CoA Dehydratase
5.2.1.2 Maleylacetoacetate Isomerase
5.3.99.7 Styrene-Oxide Isomerase

Metabolic Kit Catalog

Sulfur Metabolism Kit

3'-Phosphoadenylylsul. (PAPS)
Acetate
Adenosine-3',5'-Bisphos. (PAP)
Adenylylsulfate (APS)
Cystathionine
H₂S
L-Cystenine
L-Homocysteine
L-Homoserine
L-Serine
O-Acetyl-L-Homoserine
O-Acetyl-L-Serine
O-Succinyl-L-Homoserine
Sulfate
Sulfite
Sulfur
Thiosulfate
Trithionate
1.8.1.2 Sulfite Reductase(NADPH)
1.8.2.1 Sulfite Dehydrogenase
1.8.3.1 Sulfite Oxidase
1.8.7.1 Sulfite Reductase (Ferredoxin)
1.8.99.1 Sulfite Reductase
1.8.99.2 Adenylylsulfate Reductase
1.8.99.4 Phosphoadenosine-Phosphosulfate Reductase
1.13.11.18 Sulfur Dioxigenase
1.13.99 Miscellaneous
2.3.1.30 Serine O-Acetyltransferase
2.3.1.31 Homoserine O-Acetyltransferase
2.3.1.46 Homoserine O-Succinyltransferase
2.7.1.25 Adenylylsulfate Kinase
2.7.7.4 Sulfate Adenylyltransferase
2.7.7.5 Sulfate Adenylyltransferase (ADP)
2.8.1.5 Thiosulfate--Dithiol Sulfurtransferase
3.1.3.7 3'(2'),5'-bisphosphate nucleotidase
3.6.2.1 Adenylylsulfatase
3.6.2.2 Phosphoadenylylsulfatase
3.12.1.1 Trithionate Hydrolase
4.2.99.8 Cysteine Synthase
4.2.99.9 O-Succinylhomoserine (Thiol)-Lyase
4.4.1.2 Homocysteine Desulfhydrase
4.4.1.8 Cystathionine Beta-Lyase

Taurine And Hypotaurine Metabolism Kit

3-Sulfino-L-Alanine
5-Glutamyl-Taurine
Acetate
Cysteamine
Excretion
Hypotaurine
Isethionate
L-Cysteate
L-Cysteine
Sulfoacetaldehyde
Taurine
Taurocholate
Taurocyamine
Taurocyamine Phosphate
1.4.99.2 Taurine Dehydrogenase
1.8.1.3 Hypotaurine Dehydrogenase
1.13.11.19 Cysteamine Dioxigenase
1.13.11.20 Cysteine Dioxigenase
2.3.1.65 Glycine N-Choloyltransferase
2.3.2.2 Gamma-Glutamyltransferase
2.6.1.55 Taurine Transaminase
2.7.3.4 Taurocyamine Kinase
4.1.1.15 Glutamate Decarboxylase
4.1.1.29 Sulfoalanine Decarboxylase
4.4.1.10 Cysteine Lyase
4.4.1.12 Sulfoacetaldehyde Lyase

D-Alanine Metabolism Kit

D-Alanine
D-Alanyl-Alanyl-Poly(Glycerolphosphate)
D-Alanyl-D-Alanine
L-Alanine
O-D-Alanyl-Poly(Ribitol Phosphate)
Pyruvate
2.6.1.21 D-Alanine Transaminase
2.6.1.41 D-Methionine--Pyruvate Transaminase
5.1.1.1 Alanine Racemase
6.1.1.13 D-Alanine--Poly(Phosphoribitol) Ligase
6.3.2.4 D-Alanine-D-Alanine Ligase
6.3.2.16 D-Alanine--Alanyl-Poly(Glycerolphosphate)Ligase

Metabolic Kit Catalog

Terpenoid Biosynthesis Kit A

1,6,6-Trimethyl-2,7-Dioxobicyclo-{3,2,2}Nonan-3-One
3-Alpha(S)-Strictosidine
4,5-Dihydro-5,5-Dimethyl-4-(3-Oxobutyl)Furna-2(3H)-Onehexanoate
5-Carotene
6-Endo Hydroxycineole
6-Oxocineole
Abietate
Abscisate
Aconitine
Aphidicolin
Aristolochene
B-Carotene
Comphene
Copoly-PP
Deoxyloganin
Dimethylallyl-PP
Dimethylallyl-Tryptophan
Elymoclavine
Ent-Kaurene
Farnesyl-PP
Fenchol
GA1
GA12 Aldehyde
GA19
GA20
GA29
GA44 Diacid
GA53
GA8
Geranylgeranyl-P
Geranyl-PP
Hopanoid
Indole Alkaloid
Iridodial
Iridotrial
Isopentenyl-PP
Limonene
Loganin
Lycopene
Myrcene
Nivalenol
NPP
Phytoene
Phytofluene
Pimaradiene
Pinene
Polyprenol
PR-Toxin
Secologanin
Squalene
Squalene 2,3-Oxide
Sterol
Terpinolene
Tetrahymanol
Trichodiene
Triterpenoid
Tryptamine
Tryptophan
Veatchine
Zeaxanthin

Terpenoid Biosynthesis Kit B

1.1.1.241 6-Endo-Hydroxycineole Dehydrogenase
1.3.9.9 With Other Acceptors
1.14.13.51 6-Oxocineole Dehydrogenase
1.14.99.7 Squalene Monooxygenase
2.5.1.1 Dimethylallyltransferase
2.5.1.10 Geranyltransferase
2.5.1.21 Farnesyl-Diphosphate Farnesyltransferase
2.5.1.29 Farnesyltransferase
2.5.1.32 Geranylgeranyl-Diphosphate Geranylgeranyltransferase
2.5.1.40 Aristolochene Synthase
4.1.99.6 Trichodiene Synthase
4.3.3.2 Strictosidine Synthase
5.3.3.2 Isopentenyl-Diphosphate Delta-Isomerase

Metabolic Kit Catalog

Tetrachloroethene Degradation Kit

Acetaldehyde
Acetyl-CoA
Acetylene
Cis-1,2-Dichloroethene
Ethylene
Ethylene Glycol
Ethylene Oxide
Tetrachloroethene
Trans-1,2-Dichloroethene
Trichloroethene
Vinyl Chloride
1.1.1 With NAD+ Or NADP+ As Acceptor
1.14.13 With NADH Or NADPH...
1.18.6.1 Nitrogenase
3.3.2.3 Epoxide Hydrolase
4.2.1. Hydro-Lyases
Carbazole Degradation Kit
1,4-Cyclohexanedione
2,3-Dihydroxybenzoate
2-Amino-5-Oxo-Cyclohex-1-Enecarboxy-CoA
2-Aminobenzoate
2-Aminobenzoyl-CoA
2'-Aminobiphenyl-2,3-Diol
2-Hydroxy-6-Oxo-(2'-Aminophenyl)-Hexa-2,4-Dienoate
2-Hydroxymuconate Semialdehyde
4-Hydroxy-2-Oxovalerate
Acetaldehyde
Carbazole
Catechol
cis,Cis-Muconate
Cis-2-Hydroxypenta-2,4-dienoate
Pyruvate
1.13.11 With Incorporation Of Two Atoms Of Oxygen
1.13.11.1 Catechol 1,2-Dioxygenase
1.13.11.2 Catechol 2,3-Dioxygenase
1.14.12.1 Anthranilate 1,2-Dioxygenase.....
1.14.13.35 Anthranilate 3-Monooxygenase.....
3.7.1 In Ketonic Substances
3.7.1.9 2-Hydroxymuconate-Semialdehyde Hydrolase
4.1.1.46 O-Pyrocatechuate Decarboxylase
4.1.2 Aldehyde-Lyases
4.2.1.80 2-Oxopent-4-Enoate Hydratase

Thiamine Metabolism Kit

1-(5'-Phosphoribosyl)5-Aminoimidazole(AIR)
2-Methyl-4-Amino-5-Hydroxymethylpyrimidine Diphosphate
4-Amino-2-Methyl-5-Phosphomethylpyrimidine
4-Amino-5-Hydroxymethyl-2-Methylpyrimidine
4-Methyl-5-(2-Phosphoethyl)-Thiazole
5-(2-Hydroxyethyl)-4-Methylthiazole
Glyceraldehyde-3P
Heteropyrithiamine
Pyruvate
Thiamine
Thiamine Acetic Acid
Thiamine Aldehyde
Thiamine Diphosphate
Thiamine Phosphate
Thiamine Triphosphate
1.1.3.23 Thiamin Oxidase
2.5.1.2 Thiamin Pyridinylase
2.5.1.3 Thiamin-Phosphate Pyrophosphorylase
2.7.1.49 Hydroxymethylpyrimidine Kinase
2.7.1.50 Hydroxyethylthiazole Kinase
2.7.1.89 Thiamin Kinase
2.7.4.7 Phosphomethylpyrimidine Kinase
2.7.4.15 Thiamin-Diphosphate Kinase
2.7.4.16 Thiamin-Phosphate Kinase
2.7.6.2 Thiamin Pyrophosphokinase
3.1.3 Phosphoric Monoester Hydrolases
3.5.99.2 Thiaminase
3.6.1.15 Nucleoside-Triphosphatase
3.6.1.28 Thiamin-Triphosphatase

Biotin Metabolism Kit

7,8-Diaminononanoate
8-Amino-7-Oxononanoate
Biotin
Biotinyl-5'-AMP
Biotinyl-CoA
Dethiobiotin
Holo-(Carboxylase)
L-Lysine
N6-Biotinyl-L-Lysine
Pimelate
Pimeloyl-CoA
2.3.1.47 8-Amino-7-Oxononanoate Synthase
2.6.1.62 Adenosylmethionine--8-Amino.....
2.8.1.6 Biotin Synthase
3.4 Acting On Peptide Bonds(Peptidases)
3.5.1.12 Biotinidase
6.2.1.11 Biotin--CoA Ligase
6.2.1.14 6-Carboxyhexanoate--CoA Ligase
6.3.3.3 Dethiobiotin Synthase
6.3.4.10 Biotin Ligase.....

Metabolic Kit Catalog

Toluene Degradation Kit

2-Hydroxy-Toluene
3-Hydroxy-Toluene
3-Methylcatechol
4-Hydroxy-2-Oxovalerate
4-Hydroxybenzaldehyde
4-Hydroxybenzoate
4-Hydroxytoluene
Acetaldehyde
Benzaldehyde
Benzoate
Benzyl Alcohol
Cis,Cis-2-Hydroxy-6-Oxohept-2,4-Dienoate
Cis-2-Hydroxypenta-2,4-Dienoate
Pyruvate
Toluene
Toluene-4-Sulfonate
Toluene-Cis-1,2-Hydrodiol
1.1.190 Aryl-Alcohol Dehydrogenase
1.2.1.7 Benzaldehyde Dehydrogenase
1.2.1.28 Benzaldehyde Dehydrogenase(NAD⁺)
1.3.1.19 Cis-1,2-Dihydrobenzene1,2-Diol Dehydrogenase
1.13.11.2 Catechol 2,3-Dioxygenase
1.14.12 With NADH Or NADPH As One Donor..
1.14.12.11 Toluene Dioxygenase
1.14.13.7 Phenol 2-Monooxygenase
1.17.99.1 4-Cresol Dehydrogenase (Hydroxylating)
4.1.2 Aldehyde-Lyases
4.2.1.80 2-Oxopent-4-Enoate Hydratase

Tryptophan Metabolism Kit A

(S)-3-Hydroxybutanoyl-CoA
2,3-Dihydroxyindole
2-Amino-3-Carboxymuconate Semialdehyde
2-Aminomuconate
2-Aminomuconate Semialdehyde
2-Aminophenol
2-Formaminobenzoylacetate
2-Formly-Aminobenzaldehyde
2-Oxoadipate
2-Oxoglutarate
3-Hydroxyanthranilate
3-Hydroxykynurenine
3-Hydroxy-L-Kynurenine
3-Indole-Glycolaldehyde
3-Methyl-Dioxyindole
3-Methylindolepyruvate
3-Methoxyanthranilate
4-(2-Amino-3-Hydroxy-Phenyl)-2,4-Dioxobutanoate
4-(2-Amino-5-Hydroxyphenyl)-2,4-Dioxobutanoate
4-(2-Aminophenyl)-2,4-Dioxobutanoate
4,6-Dihydroxyquinoline
4,8-Dihydroxyquinoline
5-(2'-Carboxyethyl)-4,6-Dihydroxypicolinate
5-(2'-Formylethyl)-4,6-Dihydroxypicolinate
5-(3'-Carboxy-3'-Oxopropenyl)-4,6-Dihydroxypicolinate
5-(3'-Carboxy-3'-Oxopropyl)-4,6-Dihydroxypicolinate
5-Hydroxyindoleacetaldehyde
5-Hydroxyindoleacetate
5-Hydroxyindoleacetyl-glycine
5-Hydroxy-Indolepyruvate
5-Hydroxykynurenine
5-Hydroxykynurenine
5-Hydroxy-L-Tryptophan
5-Hydroxy-N-Formylkynurenine
5-Methoxyindoleacetate
5-Methoxytryptamine
6-Hydroxyindolelactate
6-Hydroxykynurenate
6-Hydroxymelatonin
7,8-Dihydro-7,8-Dihydroxykynurenate
7,8-Dihydroxykynurenate
8-Methoxykynurenate
Acetoacetyl-CoA
Acetyl-CoA
Acetyloxindolyl
Anthranilate
Cinnavalininate
Crotonyl-CoA
Formylanthranilate
Formyl-5-Hydroxykynurenine
Formyl-N-Acetyl-5-Methoxykynurenine
Glucobrassicin
Glutaryl-CoA
Indole-3-Acetaldoxime
Indole
Indole-3-Acetaldehyde
Indole-3-Acetamide
Indole-3-Acetonitrile
Indole-3-Ethanol

Metabolic Kit Catalog

Tryptophan Metabolism Kit B

Indoleacetate
 Indolelactate
 Indolepyruvate
 Inodxyl
 Isophenoxazine
 Kynurenate
 L-Kynurenine
 L-Tryptophanyl-tRNA
 Melatonin
 N-Acetylisatin
 N-Acetylserotonin
 N-Formylkynurenine
 N-Methylserotonin
 N-Methyltryptamine
 Oxaloacetate
 Quinolate
 Serotonin
 Tryptamine
 Tryptophan
 Xanthurenate
 Y-Oxalocrotonate
 1.1.1.35 3-Hydroxyacyl-CoA Dehydrogenase
 1.1.1.110 Indolelactate Dehydrogenase
 1.1.1.191 Indole-3-Acetaldehyde Reductase(NADPH)
 1.1.1.192 Long-Chain-Alcohol Dehydrogenase
 1.2.1 With NAD⁺ or NADP⁺ As Acceptor
 1.2.1.3 Aldehyde Dehydrogenase (NAD⁺)
 1.2.1.32 Aminomuconate-Semialdehyde Dehydrogenase
 1.2.3.1 Aldehyde Oxidase
 1.2.3.7 Indole-3-Acetaldehyde Oxidase
 1.2.4.2 Oxoglutarate Dehydrogenase(Lipoamide)
 1.3.1 With NAD⁺ or NADP⁺ As Acceptor
 1.3.1.18 Kynurenate-7,8-Dihydrodiol Dehydrogenase
 1.3.99.7 Glutaryl-CoA Dehydrogenase
 1.4.3.2 L-Amino-Acid Oxidase
 1.4.3.4 Amino Oxidase(Flavin-containing)
 1.4.3.6 Amino Oxidase(Copper-containing)
 1.5.1 With NAD⁺ or NADP⁺ As Acceptor
 1.7.3.2 Acetylxindoxyl Oxidase
 1.10.3.4 O-Aminophenol Oxidase
 1.11.1.6 Catalase
 1.13.11 With Incorporation Of Two Atoms Of Oxygen
 1.13.11.6 3-Hydroxyanthranilate 3,4-Dioxygenase
 1.13.11.10 7,8-Dihydroxykynurenate 8,8A-Dioxygenase
 1.13.11.11 Tryptophan 2,3-Dioxygenase
 1.13.11.17 Indole 2,3-Dioxygenase
 1.13.11.23 2,3-Dihydroxyindole 2,3-Dioxygenase
 1.13.11.42 Indoleamine-Pyrrole 2,3-Dioxygenase
 1.13.12.3 Tryptophan 2-Monooxygenase
 1.13.99.3 Tryptophan 2'-Dioxygenase
 1.14.13 With NADH or NADPH As One Donor...
 1.14.13.9 Kynurenine 3-Monooxygenase
 1.14.14.1 Unspecific Monooxygenase
 1.14.16 With Reduced Pteridine as One Donor...
 1.14.16.3 Anthranilate 3-Monooxygenase
 1.14.16.4 Tryptophan 5-Monooxygenase
 1.14.99.2 Kynurenine 7,8-Hydroxylase
 2.1.1 Methyltransferases
 2.1.1.4 Acetylserotonin N-Methyltransferase

Tryptophan Metabolism Kit C

2.1.1.47 Indolepyruvate C-Methyltransferase
 2.1.1.49 Amine N-Methyltransferase
 2.3.1.9 Acetyl-CoA C-Acetyltransferase
 2.3.1.87 Aralkylamine N-Acetyltransferase
 2.6.1.7 Kynurenine--Oxoglutarate Transaminase
 2.6.1.27 Tryptophan Transaminase
 3.2.3.1 Thioglucosidase
 3.5.1.4 Amidase
 3.5.1.9 Arylformamidase
 3.5.1.49 Formamidase
 3.5.5.1 Nitrilase
 3.7.1.3 Kynureninase
 4.1.1 Carboxy-Lyases
 4.1.1.28 Aromatic-L-Amino-Acid Decarboxylase
 4.1.1.43 Phenylpyruvate Decarboxylase
 4.1.1.45 Aminocarboxymuconate...
 4.1.99.1 Tryptophanase
 4.2.1 Hydro-Lyases
 4.2.1.17 Enoyl-CoA Hydratase
 4.2.1.84 Nitrile Hydratase
 6.1.1.2 Tryptophan--tRNA Ligase
 6.3.2 Acid--Amino-Acid Ligases (Peptide Synthases)

Metabolic Kit Catalog

Tyrosine Metabolism Kit A

2,4-Dihydroxyhept-2-Enedioate
 2-Carboxy-2,3-Dihydro-5,6-Dihydroxyindole
 2-Hydroxy-3-(4-Hydroxyphenyl)-Propenoate
 2-Hydroxy-5-Carboxy-Methylmuconate Semialdehyde
 2-Hydroxyhepta-2,4-Dienedioate
 2-Oxohept-3-Enedioate
 3-(3,4-Dihydroxy-Phenyl)Lactate
 3-(3,4-Dihydroxy-Phenyl)Pyruvate
 3,4-Dihydroxy-mandelaldehyde
 3,4-Dihydroxy-Mandelate
 3,4-Dihydroxy-Phenylacetaldehyde
 3,4-Dihydroxy-Phenylacetate
 3,4-Dihydroxy-Phenylethyleneglycol
 3,5-Diiodo-L-Tyrosine
 3-Amino-3-(4-Hydroxyphenyl)-Propanoate
 3-Fumaryl-Pyruvate
 3-Hydroxy-Phenylacetate
 3-Iodo-L-Tyrosine
 3-Maleyl-Pyruvate
 3-Methoxy-4-Hydroxymandelate
 3-Methoxy-4-Hydroxy-Phenylacetaldehyde
 3-Methoxy-4-Hydroxy-Phenylacetate
 3-Methoxy-4-Hydroxy-phenylethyleneglycol
 3-Methoxy-4-Hydroxy-Phenylglycol-Aldehyde
 3-Methoxy-Tyramine
 4-(L-Alanin-3-yl)-2-Hydroxy-Cis,Cis-Muconate 6-Semi.
 4-Chloro-Phenylacetate
 4-Fumaryl-Acetoacetate
 4-Hydroxy-2-Ketopimelate
 4-Hydroxy-2-Oxo-Heptandioate
 4-Hydroxy-Mandelonitrile
 4-Hydroxy-Phenylacetaldehyde
 4-Hydroxyphenyl-Acetaldoxime
 4-Hydroxy-Phenylacetate
 4-Hydroxyphenyl-Acetonitrile
 4-Hydroxyphenyl-Acetylglutamine
 4-Hydroxyphenyl-Acetylglucine
 4-Hydroxyphenyl-CoA
 4-Hydroxy-Phenylethanol
 4-Hydroxy-Phenylpyruvate
 4-Maleyl-Acetoacetate
 5-(L-Alanin-3-yl)-2-Hydroxy-Cis,Cis-Muconate 6-Semialdehyde
 5,6-Dihydroxy-Indole
 5-Carboxy-2-Oxohept-3-Enedioate
 5-Carboxymethyl-2-Hydroxymuconate
 Aceto-Acetate
 Dhurrin
 Dopachrome
 Dopamine
 Dopaquinone
 Fumarate
 Gentsiate
 Gentsiate Aldehyde
 Homogentsiate
 Homoproto-Catechuate
 Homovanillate
 Hordenine
 Hpal
 Hpal-1
 Hydroquinone

Tyrosine Metabolism Kit B

Hydroxy-Phenylactate
 Indole-5,6-Quinone
 L-Adrenaline
 L-DOPA
 L-Metanephrine
 L-Nor-Adrenaline
 L-Normetanephrine
 L-Thyroxine
 Melanin
 N-Hydroxy-L-Tyrosine
 N-Methyltyramine
 Phenol
 PQQ
 Pyruvate
 Rosmarinate
 Salidroside
 Stizolobate
 Stizolobinate
 Succinate
 Succinate Semialdehyde
 Trans-4-Hydroxy-Cinnamate
 Trans-Caffeate
 Triiodo-Thyronine
 Tyramine
 Tyrosine
 1.1.1.1 With NAD⁺ or NADP⁺ as Acceptor
 1.1.1.90 Aryl-Alcohol Dehydrogenase
 1.1.1.222 @-4-Hydroxyphenylactate Dehydrogenase
 1.1.1237 Hydroxyphenylpyruvate Reductase
 1.1.3 With Oxygen as Acceptor
 1.2.1.5 Aldehyde Dehydrogenase (NAD(P)⁺)
 1.2.1.16 Succinate-Semialdehyde Dehydrogenase (NAD(P)⁺)
 1.2.1.29 Aryl-Aldehyde Dehydrogenase
 1.2.1.45 4-Carboxy-2-Hydroxymuconate-6-Semialdehyde Dehydrogenase
 1.2.1.53 4-Hydroxyphenylacetaldehyde Dehydrogenase
 1.2.3 With Oxygen as Acceptor
 1.2.3.1 Aldehyde Oxidase
 1.4.3.2 L-Amino-Acid Oxidase
 1.4.3.4 Amino Oxidase (Flavine-Containing)
 1.4.3.6 Amino Oxidase (Copper-Containing)
 1.4.99.4 Aralkylamine Dehydrogenase
 1.10.3.1 Catechol Oxidase
 1.11.1.8 Iodide Peroxidase
 1.13.11.4 Gentsiate 1,2-Dioxygenase
 1.13.11.5 Homogentsiate 1,2-Dioxygenase
 1.13.11.15 3,4-Dihydroxyphenylacetate 2,3-Dioxygenase
 1.13.11.27 4-Hydroxyphenylpyruvate Dioxygenase
 1.13.11.29 Stizolobate Synthase
 1.13.11.30 Stizolobinate Synthase
 1.13.12 With Incorporation of One Atom of Oxygen...
 1.14.13 With NADH or NADPH as One Donor..
 1.14.13.3 4-Hydroxyphenylacetate 3-Monooxygenase
 1.14.13.18 4-Hydroxyphenylacetate 1-Monooxygenase
 1.14.13.41 Tyrosine N-Monooxygenase
 1.14.13.42 Hydroxyphenylacetoneitrile 2-Monooxygenase
 1.14.16.2 Tyrosine 3-Monooxygenase
 1.14.17.1 Dopamine Beta-Monooxygenase
 1.14.18.1 Monophenol Monooxygenase
 2.1.1 Methyltransferases
 2.1.1.6 Catechol O-Methyltransferase

Metabolic Kit Catalog

Tyrosine Metabolism Kit C

- 2.1.1.25 Phenol O-Methyltransferase
- 2.1.1.27 Tyramine N-Methyltransferase
- 2.1.1.28 Phenylethanolamine N-Methyltransferase
- 2.3.1 Acyltransferases
- 2.3.1.14 Glutamine N-Phenylacetyltransferase
- 2.3.1.140 Roxmarinate Synthase
- 2.4.1.178 Hydroxymandelonitrile Glucosyltransferase
- 2.6.1.1 Aspartate Transaminase
- 2.6.1.5 Tyrosine Transaminase
- 2.6.1.9 Histidinol-Phosphate Transaminase
- 2.6.1.49 Dihydroxyphenylalanine Transaminase
- 2.6.1.57 Aromatic-Amino-Acid Transaminase
- 3.7.1.2 Fumarylacetoacetase
- 3.7.1.5 Acylpyruvate Hydrolase
- 4.1.1 Carboxy-Lyases
- 4.1.1.25 Tyrosine Decarboxylase
- 4.1.1.28 Aromatic-L-Amino-Acid Decarboxylase
- 4.1.1.62 Gentsiate Decarboxylase
- 4.1.1.68 5-Oxopent-3-Ene-1,2,5-Tricarboxylate Decarboxylase
- 4.1.99.2 Tyrosine Phenol-Lyase
- 4.2.1 Hydro-Lyases
- 4.3.1.5 Phenylalanine Ammonia-Lyase
- 4.3.1.11 Dihydroxyphenylalanine Ammonia-Lyase
- 5.2.1.2 Maleylacetoacetate Isomerase
- 5.2.1.4 Maleylpyruvate Isomerase
- 5.3.1 Interconverting Aldoses and Ketoses
- 5.3.2.1 Phenylpyruvate Tautomerase
- 5.3.3.10 5-Carboxymethyl-2-Hydroxyruconate ...
- 6.2.1.30 Phenylacetate--CoA Ligase

Ubiquinone Biosynthesis Kit

- (2,3-Dihydroxybenzoyl)Adenylate
- (L-Seryl)Adenylate
- 1,4-Dihydroxy-2-Naphthoate
- 2,3-Dihydroxy-2,3-Dihydrobenzoate
- 2,3-Dihydroxybenzoate
- 2-Demethyl-Menaquinone
- 2-Hexaprenyl-3-Methyl-5-Hydroxy-6-Methoxy-1,4-Benzoquinone
- 2-Hexaprenyl-3-Methyl-6-Methoxy-1,4-Benzoquinone
- 2-Hexaprenyl-6-Hydroxyphenol
- 2-Hexaprenyl-6-Methoxy-1,4-Benzoquinone
- 2-Hexaprenyl-6-Methoxyphenol
- 2-Hexaprenylphenol
- 2-Octaprenyl-3-Methyl-5-Hydroxy-6-Methoxy-1,4-Benzoquinone
- 2-Octaprenyl-3-Methyl-6-Methoxy-1,4-Benzoquinone
- 2-Octaprenyl-6-Hydroxyphenol
- 2-Octaprenyl-6-Methoxy-1,4-Benzoquinone
- 2-Octaprenyl-6-Methoxyphenol
- 2-Octaprenylphenol
- 2-Oxoglutarate
- 2-Polyprenylphenol
- 2-Succinyl-6-Hydroxy-2,4-Cyclohexadiene-1-Carboxylate
- 2-Succinyl-Benzoate
- 2-Succinyl-Benzoyl-CoA
- 3-Hexaprenyl-4,5-Dihydroxybenzoate
- 3-Octaprenyl-4-Hydroxybenzoate
- 4-Hydroxy-3-Polyprenyl-Benzoate
- 4-Hydroxybenzoate
- 5-Hydroxy-2-Polyprenylphenol
- All-Trans-Hexaprenyl Diphosphate
- All-Trans-Octaprenyl Diphosphate
- Chorismate
- Enterochelin
- Isochorismate
- L-Serine
- Menaquinol/Phylloquinol
- Menaquinone/Phylloquinone
- Polyisopentenyl-Pyrolinate
- Succinate Semialdehyde-Thiamine Diphosphate Anion
- Ubiquinol
- Ubiquinone
- 1.3.1.28 2,3-Dihydro-2,3-Dihydroxybenzoate Dehydrogenase
- 1.6.5 With Quinone or Related Compound as Acceptor
- 1.6.5.3 NADH Dehydrogenase(Ubiquinone)
- 1.13.12 With Incorporation of One Atom of Oxygen...
- 1.14.13 With NADH or NADPH as One Donor....
- 2.1.1 Methyltransferases
- 2.1.1.64 3-Demethylubiquinone-9 3-O-Methyltransferase
- 2.5.1 Trnsferring Alkyl Or Aryl Groups, Other Than Methyl Groups
- 2.5.1.39 4-Hydroxybenzoate Nonaprenyltransferase
- 2.7.7 Nucleotidyltransferases
- 2.7.7.8 (2,3-Dihydroxybenzoyl)Adenylate Synthase
- 3.3.2.1 Isochorismatase
- 4.1.1.71 2-Oxoglutarate Decarboxylase
- 4.1.3 Oxo-Acid-Lyases
- 4.1.3.36 Naphthoate Synthase
- 4.2.1 Hydro-Layses
- 5.4.99.6 Isochorismate Synthase
- 6.2.1.26 O-Succinylbenzoate--CoA Ligase
- 6.3.2 Acid--Amino-Acid Ligases

Metabolic Kit Catalog

Urea Cycle And Metabolism Of Amino Groups Kit A

Arginine
Aspartate
Carbamoyl-P
Citrulline
Co2
Creatine
Creatine-P
Creatinine
Excretion
Formaldehyde
Formate
Fumarate
Glutamate
Guanidino-Acetate
Guanidino-Acetate-P
L-1-Pyrroline 5-Carboxylate
L-Arginino-Succinate
L-Glutamate 5-Semialdehyde
L-Glutamyl-P
N-Acetyl-Glutamate
N-Acetylglutamate Semialdehyde
N-Acetyl-Glutamyl-P
N-Acetyl-Ornithine
N-Carbamoyl-Sarcosine
NH3
N-Methyl-Hydantoin
Ornithine
Proline
Putrescine
Sarcosine
Spermidine
Spermine
Urea
Urea-1-Carboxylate
1.2.1.38 N-Acetyl-Gamma-Glutamyl-Phosphate Reductase
1.2.1.41 Glutamate-5-Semialdehyde Dehydrogenase
1.2.1.46 Formaldehyde Dehydrogenase
1.4.1.3 Glutamate Dehydrogenase (NAD(P)+)
1.5.1.2 Pyrroline-5-Carboxylate Reductase
1.5.99.1 Sarcosine Dehydrogenase
2.1.1.2 Guanidinoacetate N-Methyltransferase
2.1.3.3 Ornithine Carbamoyltransferase
2.1.4.1 Glycine Amidinotransferase
2.3.1.1 Amino-Acid N-Acetyltransferase
2.3.1.35 Glutamate N-Acetyltransferase
2.5.1.16 Spermidine Synthase
2.5.1.22 Spermine Synthase
2.6.1.11 Acetylornithine Transaminase
2.6.1.13 Ornithine--Oxo-Acid Transaminase
2.6.1.69 N2-Acetylornithine 5-Transaminase
2.7.2.8 Acetylglutamate Kinase
2.7.2.11 Glutamate 5-Kinase
2.7.3.1 Guanidoacetate Kinase
2.7.3.2 Creatine Kinase
3.5.1.5 Urease
3.5.1.14 Aminoacylase
3.5.1.16 Acetylornithine Deacetylase
3.5.1.54 Allophanate Hydrolase
3.5.1.59 N-Carbamoylsarcosine Amidase
3.5.2.10 Creatinase

Urea Cycle And Metabolism Of Amino Groups Kit B

3.5.2.14 N-Methylhydantoinase (ATP-Hydrolysing)
3.5.3.3 Creatinase
3.5.4.21 Creatinine Deaminase
4.1.1.17 Ornithine Decarboxylase
4.3.2.1 Argininosuccinate Lyase
6.3.4.5 Argininosuccinate Synthase
6.3.4.6 Urea Carboxylase
6.3.4.16 Carbamoyl-Phosphate Synthase(Ammonia)

Metabolic Kit Catalog

Valine, Leucine And Isoleucine Biosynthesis Kit

(S)-2-Aceto-2-Hydroxybutanoate
 (S)-2-Acetolactate
 (S)-2-Hydroxy-3-Methyl-3-Oxopentanoate
 2,3-Dihydroxy-3-Methylbutanoate
 2,3-Dihydroxy-3-Methylpentanoate
 2-Oxo-3-Methyl-Pentanoate
 2-Oxoisovalerate
 3-Hydroxy-3-Methyl-2-Oxobutanoate
 2-Hydroxyethyl-ThPP
 2-Isopropylmalate
 2-Isopropylmaleate
 2-Oxo-4-Methyl-3-Carboxypentanoate
 2-Oxobutanoate
 3-Isopropylmalate
 4-Methyl-2-Oxopentanoate
 L-Ile-tRNA(Ile)
 L-Isoleucine
 L-Leucine
 L-Leu-tRNA(Leu)
 L-Valine
 L-Val-tRNA(Val)
 Protein
 Pyruvate
 1.1.1.85 3-Isopropylmalate Dehydrogenase
 1.1.1.86 Ketol-Acid Reductoisomerase
 1.2.4.1 Pyruvate Dehydrogenase(Lipoamide)
 1.4.1.9 Leucine Dehydrogenase
 2.6.1.6 Leucine Transaminase
 2.6.1.42 Branched-Chain-Amino-Acid Transaminase
 2.6.1.66 Valine--Pyruvate Transaminase
 4.1.3.12 2-Isopropylmalate Synthase
 4.1.3.18 Acetolactate Synthase
 4.2.1.9 Dihydroxy-Acid Dehydratase
 4.2.1.33 3-Isopropylmalate Dehydratase
 5.4.99.3 2-Acetolactate Mutase
 6.1.1.4 Leucine--tRNA Ligase
 6.1.1.5 Isoleucine--tRNA Ligase
 6.1.1.9 Valine--tRNA Ligase

Valine, Leucine And Isoleucine Degradation Kit A

(S)-(2-Methyl-Butanoyl)-Dihydroliipoamide
 (S)-(2-Methyl-Propionyl)-Dihydroliipoamide
 (S)-(3-Methyl-Butanoyl)-Dihydroliipoamide
 (S)-3-Amino-Isobutanoate
 (S)-3-Hydroxy-2-Methylbutyryl-CoA
 (S)-3-Hydroxy-3-Methylglutaryl-CoA
 (S)-3-Hydroxy-Isobutyryl-CoA
 (S)-3-Hydroxy-Isobutyrate
 (S)-Methylmalonate Semialdehyde
 (S)-Methyl-Malonyl-CoA
 3-Methyl-2-Oxobutanoate
 4-Methyl-3-Oxopentanoate
 Methyl-Malonyl-CoA
 2-Oxo-Isopentanoate
 2-Methyl-Acetoacetyl-CoA
 2-Methylbutanoyl-CoA
 3-Hydroxy-Isopentyl-CoA
 3-Methyl-2-Oxopentanoate
 3-Methylbut-2-Enoyl-CoA
 3-Methylbutanoyl-CoA
 3-Methyl-Glutaconyl-CoA
 4-Methyl-2-Oxopentanoate
 Acetoacetate
 Acetoacetyl-CoA
 Acetyl-CoA
 Branched Chain Fatty Acid
 Isobutyryl-CoA
 L-Beta-Leucine
 L-Isoleucine
 L-Leucine
 L-Valine
 Methacrylyl-CoA
 Methylmalonate
 Propionyl-CoA
 Succinyl-CoA
 Trans-2-Methylbut-2-Enoyl-CoA
 1.1.1.31 3-Hydroxyisobutyrate Dehydrogenase
 1.1.1.35 3-Hydroxyacyl-CoA Dehydrogenase
 1.1.1.178 3-Hydroxy-2-Methylbutyryl-CoA Dehydrogenase
 1.2.1.3 Aldehyde Dehydrogenase(NAD+)
 1.2.1.25 2-Oxoisovalerate Dehydrogenase(Acylating)
 1.2.1.27 Methylmalonate-Semialdehyde Dehydrogenase...
 1.2.3.1 Aldehyde Oxidase
 1.2.4.4 3-Methyl-2-Oxobutanoate Dehydrogenase...
 1.3.99.2 Butyryl-CoA Dehydrogenase
 1.3.99.3 Acyl-CoA Dehydrogenase
 1.3.99.10 Isovaleryl-coA Dehydrogenase
 1.3.99.12 2-Methylacyl-CoA Dehydrogenase
 1.4.1.9 Leucine Dehydrogenase
 1.4.3.2 L-Amino-Acid Oxidase
 2.3.1 Acyltransferases
 2.3.1.16 Acetyl-CoA C-Acyltransferase
 2.6.1.6 Leucine Transaminase
 2.6.1.18 Beta-Alanine--Pyruvate Transaminase
 2.6.1.22 (S)-3-Amino-2-Methylpropionate Transaminase
 2.8.3.5 3-Oxoacid CoA-Transferase
 3.1.2.4 3-Hydroxyisobutyryl-CoA Hydrolase
 4.1.3.4 Hydroxymethylglutaryl-CoA Lyase
 4.1.3.5 Hydroxymethylglutaryl-CoA Synthase
 4.1.99 Other Carbon-Carbon Lyases

Metabolic Kit Catalog

Valine, Leucine And Isoleucine Degradation Kit B

4.2.1.17 Enoyl-CoA Hydratase
4.2.1.18 Methylglutaconyl-CoA Hydratase
5.1.99.1 Methylmalonyl-CoA Epimerase
5.4.3.7 Leucine 2,3-Aminomutase
5.4.99.2 Methylmalonyl-CoA Mutase
6.4.1.3 Propionyl-CoA Carboxylase
6.4.1.4 Methylcrotonoyl-CoA Carboxylase

Vitamin B6 Metabolism Kit

2-(Acetamidomethylene)-3-(Hydroxymethyl)Succinate
2-(Actamidomethylene)Succinate
2-Methyl-3-Hydroxy-5-Formylpyridine-4-Carboxylate
2-Oxo-3-hydroxy-4-Phosphobutanoate
2-Oxoglutarate
3-Aminopropane-1,2-Diol
3-Hydroxy-2-Methylpyridine-4,5-Dicarboxylate
3-Hydroxy-2-Methylpyridine-5-Carboxylate
3-Hydroxy-4Hydroxymethyl-2-Methylpyridine-5-Carboxylate
4-Hydroxy-L-Threonine
4-Phospho-D-Erythronate
4-Pyridoxate
4-Pyridoxo-Lactone
5-Pyridoxolactone
A-Hydroxymethyl Succinate Semialdehyde
D-Alanine
D-Erythrose 4-Phosphate
D-Glutamate
Excretion
Glycolaldehyde
Isopyridoxal
O-Phospho-4-Hydroxy-L-Threonine
Pyridoxal
Pyridoxal 5-Phosphate
Pyridoxamine
Pyridoxamine 5-Phosphate
Pyridoxine
Pyridoxine Phosphate
Pyruvate
Succinate Semialdehyde
1.1.1 With NAD⁺ or NADP⁺ as Acceptor
1.1.1.65 Pyridoxine 4-Dehydrogenase
1.1.1.107 Pyridoxal 4-Hehydrogenase
1.1.99.9 Pyridoxine 5-Dehydrogenase(Acceptor)
1.2.3.1 Aldehyde Oxidase
1.2.3.8 Pyridoxal Oxidase
1.3.1.12 Prephenate Dehydrogenase
1.4.3.5 Pyridoxamine-Phosphate Oxidase
1.14.12.4 3-Hydroxy-2-Methylpyridinecarboxylate Dioxygenase
1.14.12.5 5-Pyridoxate Dioxygenase
2.6.1.30 Pyrisoxamine--Pyruvate Transaminas
2.6.1.31 Pyridoxamine--Oxaloacetate Transaminase
2.6.1.52 Phosphoserine Transaminase
2.6.1.54 Pyridoxamine-Phosphate Transaminase
2.7.1.35 Pyridoxal Kinase
3.1.1.27 4-Pyridoxolactonase
3.1.3 Phosphoric Monoester Hydrolases
3.5.1.29 2-(Acetamidomethylene)Succinate Hydrolase
3.5.1.66 2-(Hydoxymethyl)-3-(Acetamidomethylene)...