

<b>BIOCHEMICAL</b>	<b>zscore</b>
3-ureidopropionate	2.70731518
2-hydroxybutyrate/2-hydroxyisobutyrate	1.911296449
tryptophan betaine	1.595006454
2-aminobutyrate	1.591076431
propionylcarnitine (C3)	1.450492613
3-hydroxyisobutyrate	1.43240715
creatine	1.429373514
creatinine	1.318953782
phenol sulfate	1.231658289
alpha-hydroxyisovalerate	1.212991169
1-oleoylglycerol (18:1)	1.209878379
homoarginine	1.160127547
3-hydroxyoctanoate	1.14417638
pyruvate	1.083130773
acetoacetate	1.05940886
dihomo-linoleate (20:2n6)	1.05021682
alpha-hydroxyisocaproate	1.047089139
isovalerylcarnitine (C5)	0.982118922
3-hydroxybutyrate (BHBA)	0.972732251
carnitine	0.969254227
beta-hydroxyisovalerate	0.947780144
3-methylglutarylcarnitine (2)	0.887942135
dihomo-linolenate (20:3n3 or n6)	0.877392713
3-methyl-2-oxovalerate	0.813771298
1-palmitoylglycerol (16:0)	0.787749323
4-methyl-2-oxopentanoate	0.784607703
glycine	0.773377571
methylsuccinoylcarnitine	0.764334492
3-methyl-2-oxobutyrate	0.686043156
urate	0.67160231
phosphate	0.660547704
acetylcarnitine (C2)	0.656817937
butyrylcarnitine (C4)	0.653885515
behenoyl sphingomyelin (d18:1/22:0)*	0.644504304
N-acetylglycine	0.637326325
mannose	0.607457469
methylmalonate (MMA)	0.604328343
fructose	0.598336445
spermidine	0.593751883
7-alpha-hydroxy-3-oxo-4-cholestenoate (7-Hoca)	0.557248463
inosine	0.550808181
isobutyrylcarnitine (C4)	0.531142265
3-methylglutaconate	0.503152907
cytidine	0.430446846
glycerophosphoinositol*	0.413394856
urea	0.407561954
oxalate (ethanedioate)	0.407495769
acisoga	0.406594764
maleate	0.397335483

threonate	0.364922305
deoxycarnitine	0.355558964
uridine	0.355494025
2-hydroxyadipate	0.341190563
dimethylglycine	0.340531646
sphingomyelin (d18:1/20:0, d16:1/22:0)*	0.338963502
glutaryl carnitine (C5-DC)	0.337472224
lysine	0.336963532
orotidine	0.304051405
succinyl carnitine (C4-DC)	0.297683281
2-hydroxy-3-methylvalerate	0.296348935
1-stearoyl-2-docosahexaenoyl-GPE (18:0/22:6)*	0.286148819
octanoyl carnitine (C8)	0.274749934
N1-Methyl-2-pyridone-5-carboxamide	0.268365142
trimethylamine N-oxide	0.242682423
choline phosphate	0.231638374
cis-4-decenoyl carnitine (C10:1)	0.193310182
N-acetyl-3-methylhistidine*	0.180464481
lactate	0.173090163
carboxyethyl-GABA	0.164291144
ethylmalonate	0.154135378
pyroglutamine*	0.153625661
guanosine	0.151815238
tiglyl carnitine (C5:1-DC)	0.142730793
1,5-anhydroglucitol (1,5-AG)	0.107042135
orotate	0.105646893
aspartate	0.099646443
cholesterol	0.099347028
1-methyl-4-imidazoleacetate	0.072843299
citramalate	0.05631197
ribonate	0.034613195
1-(1-enyl-stearoyl)-2-docosahexaenoyl-GPE (P-18:0/22:6)*	0.029107125
stearoyl sphingomyelin (d18:1/18:0)	0.017332159
6-oxopiperidine-2-carboxylate	0.017075478
bilirubin (Z,Z)	0.015425321
sphingomyelin (d18:1/24:1, d18:2/24:0)*	0.011643511
betaine	0.004944281
choline	0.000978312
dimethylmalonic acid	-0.006379149
stachydrine	-0.010644992
2-oxoadipate	-0.022376136
picolinate	-0.047462561
1-palmitoyl-2-oleoyl-GPC (O-16:0/18:1)*	-0.070805102
N-acetyl-aspartyl-glutamate (NAAG)	-0.114178607
1-stearoyl-2-oleoyl-GPC (18:0/18:1)	-0.11823025
isocitrate	-0.141727581
3-methylhistidine	-0.141954741
2'-deoxyuridine	-0.146149336
beta-hydroxyisovaleroyl carnitine	-0.148954091
N-acetylglucosaminylasparagine	-0.15239882

arabitol/xylitol	-0.163954008
glycerol 3-phosphate	-0.174917293
1-stearoyl-2-docosaheptaenoyl-GPC (18:0/22:6)	-0.176050743
N-acetylglutamine	-0.184637241
1-stearoyl-2-linoleoyl-GPC (18:0/18:2)*	-0.19045507
leucine	-0.201147535
7-methylguanine	-0.216693029
1-oleoyl-2-linoleoyl-GPC (18:1/18:2)*	-0.227971772
erythronate*	-0.229357436
5,6-dihydrothymine	-0.231479201
1-palmitoyl-2-arachidonoyl-GPC (O-16:0/20:4)*	-0.244001603
4-acetamidobutanoate	-0.256634153
sphingomyelin (d18:1/18:1, d18:2/18:0)	-0.257546524
valine	-0.258378797
galactonate	-0.269588944
N-acetylhistidine	-0.282458338
methionine	-0.295028754
succinate	-0.296607117
N-formylmethionine	-0.297178303
1-(1-enyl-palmitoyl)-2-oleoyl-GPC (P-16:0/18:1)*	-0.304645091
glycerol	-0.309113567
glutamine	-0.311977696
N-acetylphenylalanine	-0.318973122
3-hydroxy-3-methylglutarate	-0.339341924
N2-methylguanosine	-0.34310338
1-palmitoyl-2-docosaheptaenoyl-GPC (16:0/22:6)	-0.346399954
5-methyluridine (ribothymidine)	-0.349343765
N-acetylneuraminic acid	-0.350424141
glutamate, gamma-methyl ester	-0.35354993
trigonelline (N'-methylnicotinate)	-0.356686932
1-palmitoyl-2-oleoyl-GPC (16:0/18:1)	-0.359779863
1-stearoyl-2-dihomo-linolenoyl-GPC (18:0/20:3n3 or 6)*	-0.368197539
1,2-dipalmitoyl-GPC (16:0/16:0)	-0.37033878
1-palmitoyl-2-adrenoyl-GPC (16:0/22:4)*	-0.395965718
5-methylthioadenosine (MTA)	-0.424933311
1-(1-enyl-stearoyl)-2-arachidonoyl-GPE (P-18:0/20:4)*	-0.437126172
sphingomyelin (d18:2/16:0, d18:1/16:1)*	-0.446489947
indoleacetate	-0.446810246
citrate	-0.457419319
p-cresol sulfate	-0.463460869
1-palmitoyl-2-dihomo-linolenoyl-GPC (16:0/20:3n3 or 6)*	-0.471627513
arabonate/xylonate	-0.479411827
palmitoyl sphingomyelin (d18:1/16:0)	-0.482792618
methionine sulfone	-0.487604639
sphingomyelin (d18:1/14:0, d16:1/16:0)*	-0.492609872
N-acetylarginine	-0.493792628
C-glycosyltryptophan	-0.494778613
xanthine	-0.495806872
N-acetylserine	-0.50832018
aconitate [cis or trans]	-0.525601673

dimethylarginine (SDMA + ADMA)	-0.528220079
tryptophan	-0.541468018
phenylacetylglutamine	-0.566179812
phenyllactate (PLA)	-0.566866938
pseudouridine	-0.570263774
N2,N2-dimethylguanosine	-0.57761759
N-acetylmethionine	-0.578253861
1-(1-enyl-palmitoyl)-2-arachidonoyl-GPC (P-16:0/20:4)*	-0.602659799
erythritol	-0.611174402
homocarnosine	-0.616233147
1-myristoyl-2-palmitoyl-GPC (14:0/16:0)	-0.618584986
gluconate	-0.620889497
N1-methyladenosine	-0.621961928
1-(1-enyl-palmitoyl)-2-docosahexaenoyl-GPE (P-16:0/22:6)*	-0.622535776
1-palmitoyl-2-arachidonoyl-GPC (16:0/20:4n6)	-0.626153561
N-acetylthreonine	-0.641039681
asparagine	-0.658632282
pipecolate	-0.669705415
tartarate	-0.672572112
1-palmitoyl-2-palmitoleoyl-GPC (16:0/16:1)*	-0.674768031
1-stearoyl-2-arachidonoyl-GPC (18:0/20:4)	-0.683690776
cortisone	-0.705384298
phosphoethanolamine	-0.706371796
1-palmitoyl-GPC (16:0)	-0.710250927
N-acetylasparagine	-0.72171199
1-palmitoyl-2-linoleoyl-GPC (16:0/18:2)	-0.735646235
glucuronate	-0.743042025
malonate	-0.753820503
1-oleoyl-GPC (18:1)	-0.761839439
myo-inositol	-0.789829865
mannitol/sorbitol	-0.791712795
taurine	-0.797094749
pantothenate	-0.79722917
N-acetylalanine	-0.800628008
O-sulfo-L-tyrosine	-0.806332138
serine	-0.827764064
homovanillate (HVA)	-0.832810682
gulonate*	-0.833123826
isoleucine	-0.838460796
glucose	-0.841658245
N6,N6,N6-trimethyllysine	-0.846736906
allantoin	-0.849017133
sulfate*	-0.850235562
ribitol	-0.858420319
N-acetylvaline	-0.867393902
alanine	-0.881921523
5-oxoproline	-0.907722791
alpha-ketoglutarate	-0.912417434
phenylalanine	-0.916062726
threonine	-0.917032208

2'-deoxycytidine	-0.929027041
1-(1-enyl-palmitoyl)-2-arachidonoyl-GPE (P-16:0/20:4)*	-0.936226554
arginine	-0.937932634
1-stearoyl-GPC (18:0)	-0.980315184
histidine	-0.996181474
N-acetylisoleucine	-1.011877132
3-(4-hydroxyphenyl)lactate	-1.034920872
N-acetylputrescine	-1.038839394
trans-4-hydroxyproline	-1.046097432
N-acetylaspartate (NAA)	-1.069272508
1-methylhistidine	-1.106408792
N-acetyltaurine	-1.111179096
nicotinamide riboside	-1.122585768
ornithine	-1.123418457
glutamate	-1.157668178
N-acetylglutamate	-1.168298247
2-piperidinone	-1.174615362
proline	-1.205500601
3-methoxytyrosine	-1.214986349
cysteine	-1.238529003
pyridoxate	-1.281411339
citrulline	-1.307462667
malate	-1.32268475
glycerate	-1.334832844
1-methylnicotinamide	-1.334833528
N-acetyl-beta-alanine	-1.416184286
kynurenine	-1.426208727
hypoxanthine	-1.458458488
argininosuccinate	-1.494063042
pyridoxal	-1.633210375
adenine	-1.753377378
tyrosine	-1.822223544
tartronate (hydroxymalonate)	-1.942093204
2-aminoheptanoate	-2.198803566
4-guanidinobutanoate	-2.502798059

<b>SUPER_PATHWAY</b>	<b>SUB_PATHWAY</b>	<b>HMDB_ID</b>
Nucleotide	Pyrimidine Metabolism, Uracil containing	HMDB00026
Amino Acid	Methionine, Cysteine, SAM and Taurine Metabolism	NA
Amino Acid	Tryptophan Metabolism	HMDB61115
Amino Acid	Methionine, Cysteine, SAM and Taurine Metabolism	HMDB00650
Lipid	Fatty Acid Metabolism (also BCAA Metabolism)	HMDB00824
Amino Acid	Leucine, Isoleucine and Valine Metabolism	HMDB00336
Amino Acid	Creatine Metabolism	HMDB00064
Amino Acid	Creatine Metabolism	HMDB00562
Amino Acid	Phenylalanine and Tyrosine Metabolism	HMDB60015
Amino Acid	Leucine, Isoleucine and Valine Metabolism	HMDB00407
Lipid	Monoacylglycerol	HMDB11567
Amino Acid	Urea cycle; Arginine and Proline Metabolism	HMDB00670
Lipid	Fatty Acid, Monohydroxy	HMDB01954
Carbohydrate	Glycolysis, Gluconeogenesis, and Pyruvate Metabolism	HMDB00243
Lipid	Ketone Bodies	HMDB00060
Lipid	Polyunsaturated Fatty Acid (n3 and n6)	HMDB05060
Amino Acid	Leucine, Isoleucine and Valine Metabolism	HMDB00746
Amino Acid	Leucine, Isoleucine and Valine Metabolism	HMDB00688
Lipid	Ketone Bodies	HMDB00357
Lipid	Carnitine Metabolism	HMDB00062
Amino Acid	Leucine, Isoleucine and Valine Metabolism	HMDB00754
Amino Acid	Leucine, Isoleucine and Valine Metabolism	HMDB00552
Lipid	Polyunsaturated Fatty Acid (n3 and n6)	HMDB02925
Amino Acid	Leucine, Isoleucine and Valine Metabolism	HMDB03736
Lipid	Monoacylglycerol	HMDB31074
Amino Acid	Leucine, Isoleucine and Valine Metabolism	HMDB00695
Amino Acid	Glycine, Serine and Threonine Metabolism	HMDB00123
Amino Acid	Leucine, Isoleucine and Valine Metabolism	NA
Amino Acid	Leucine, Isoleucine and Valine Metabolism	HMDB00019
Nucleotide	Purine Metabolism, (Hypo)Xanthine/Inosine containing	HMDB00289
Energy	Oxidative Phosphorylation	HMDB01429
Lipid	Fatty Acid Metabolism(Acyl Carnitine)	HMDB00201
Lipid	Fatty Acid Metabolism (also BCAA Metabolism)	HMDB02013
Lipid	Sphingolipid Metabolism	HMDB12103
Amino Acid	Glycine, Serine and Threonine Metabolism	HMDB00532
Carbohydrate	Fructose, Mannose and Galactose Metabolism	HMDB00169
Lipid	Fatty Acid Metabolism (also BCAA Metabolism)	HMDB00202
Carbohydrate	Fructose, Mannose and Galactose Metabolism	HMDB00660
Amino Acid	Polyamine Metabolism	HMDB01257
Lipid	Sterol	HMDB12458
Nucleotide	Purine Metabolism, (Hypo)Xanthine/Inosine containing	HMDB00195
Amino Acid	Leucine, Isoleucine and Valine Metabolism	HMDB00736
Amino Acid	Leucine, Isoleucine and Valine Metabolism	HMDB00522
Nucleotide	Pyrimidine Metabolism, Cytidine containing	HMDB00089
Lipid	Phospholipid Metabolism	NA
Amino Acid	Urea cycle; Arginine and Proline Metabolism	HMDB00294
Cofactors and Vitamins	Ascorbate and Aldarate Metabolism	HMDB02329
Amino Acid	Polyamine Metabolism	NA
Lipid	Fatty Acid, Dicarboxylate	HMDB00176

Cofactors and Vitamins	Ascorbate and Aldarate Metabolism	HMDB00943
Lipid	Carnitine Metabolism	HMDB01161
Nucleotide	Pyrimidine Metabolism, Uracil containing	HMDB00296
Lipid	Fatty Acid, Dicarboxylate	HMDB00321
Amino Acid	Glycine, Serine and Threonine Metabolism	HMDB00092
Lipid	Sphingolipid Metabolism	HMDB12102
Amino Acid	Lysine Metabolism	HMDB13130
Amino Acid	Lysine Metabolism	HMDB00182
Nucleotide	Pyrimidine Metabolism, Orotate containing	HMDB00788
Energy	TCA Cycle	HMDB61717
Amino Acid	Leucine, Isoleucine and Valine Metabolism	HMDB00317
Lipid	Phospholipid Metabolism	HMDB05334
Lipid	Fatty Acid Metabolism(Acyl Carnitine)	HMDB00791
Cofactors and Vitamins	Nicotinate and Nicotinamide Metabolism	HMDB04193
Lipid	Phospholipid Metabolism	HMDB00925
Lipid	Phospholipid Metabolism	HMDB01565
Lipid	Fatty Acid Metabolism(Acyl Carnitine)	NA
Amino Acid	Histidine Metabolism	NA
Carbohydrate	Glycolysis, Gluconeogenesis, and Pyruvate Metabolism	HMDB00190
Amino Acid	Glutamate Metabolism	HMDB02201
Amino Acid	Leucine, Isoleucine and Valine Metabolism	HMDB00622
Amino Acid	Glutamate Metabolism	NA
Nucleotide	Purine Metabolism, Guanine containing	HMDB00133
Amino Acid	Leucine, Isoleucine and Valine Metabolism	HMDB02366
Carbohydrate	Glycolysis, Gluconeogenesis, and Pyruvate Metabolism	HMDB02712
Nucleotide	Pyrimidine Metabolism, Orotate containing	HMDB00226
Amino Acid	Alanine and Aspartate Metabolism	HMDB00191
Lipid	Sterol	HMDB00067
Amino Acid	Histidine Metabolism	HMDB02820
Amino Acid	Glutamate Metabolism	HMDB00426
Carbohydrate	Pentose Metabolism	HMDB00867
Lipid	Plasmalogen	HMDB11394
Lipid	Sphingolipid Metabolism	HMDB01348
Amino Acid	Lysine Metabolism	HMDB61705
Cofactors and Vitamins	Hemoglobin and Porphyrin Metabolism	HMDB00054
Lipid	Sphingolipid Metabolism	HMDB12107
Amino Acid	Glycine, Serine and Threonine Metabolism	HMDB00043
Lipid	Phospholipid Metabolism	HMDB00097
Lipid	Fatty Acid, Dicarboxylate	HMDB02001
Xenobiotics	Food Component/Plant	HMDB04827
Amino Acid	Lysine Metabolism	HMDB00225
Amino Acid	Tryptophan Metabolism	HMDB02243
Lipid	Phospholipid Metabolism	NA
Amino Acid	Glutamate Metabolism	HMDB01067
Lipid	Phospholipid Metabolism	HMDB08038
Energy	TCA Cycle	HMDB00193
Amino Acid	Histidine Metabolism	HMDB00479
Nucleotide	Pyrimidine Metabolism, Uracil containing	HMDB00012
Amino Acid	Leucine, Isoleucine and Valine Metabolism	NA
Carbohydrate	Aminosugar Metabolism	HMDB00489

Carbohydrate	Pentose Metabolism	NA
Lipid	Glycerolipid Metabolism	HMDB00126
Lipid	Phospholipid Metabolism	HMDB08057
Amino Acid	Glutamate Metabolism	HMDB06029
Lipid	Phospholipid Metabolism	NA
Amino Acid	Leucine, Isoleucine and Valine Metabolism	NA
Nucleotide	Purine Metabolism, Guanine containing	HMDB00897
Lipid	Phospholipid Metabolism	NA
Carbohydrate	Aminosugar Metabolism	HMDB00613
Nucleotide	Pyrimidine Metabolism, Thymine containing	HMDB00079
Lipid	Phospholipid Metabolism	NA
Amino Acid	Polyamine Metabolism	HMDB03681
Lipid	Sphingolipid Metabolism	HMDB12101
Amino Acid	Leucine, Isoleucine and Valine Metabolism	HMDB00883
Carbohydrate	Fructose, Mannose and Galactose Metabolism	HMDB00565
Amino Acid	Histidine Metabolism	HMDB32055
Amino Acid	Methionine, Cysteine, SAM and Taurine Metabolism	HMDB00696
Energy	TCA Cycle	HMDB00254
Amino Acid	Methionine, Cysteine, SAM and Taurine Metabolism	HMDB01015
Lipid	Plasmalogen	NA
Lipid	Glycerolipid Metabolism	HMDB00131
Amino Acid	Glutamate Metabolism	HMDB00641
Amino Acid	Phenylalanine and Tyrosine Metabolism	HMDB00512
Lipid	Mevalonate Metabolism	HMDB00355
Nucleotide	Purine Metabolism, Guanine containing	HMDB05862
Lipid	Phospholipid Metabolism	HMDB07991
Nucleotide	Pyrimidine Metabolism, Uracil containing	HMDB00884
Carbohydrate	Aminosugar Metabolism	HMDB00230
Amino Acid	Glutamate Metabolism	HMDB61715
Cofactors and Vitamins	Nicotinate and Nicotinamide Metabolism	HMDB00875
Lipid	Phospholipid Metabolism	HMDB07972
Lipid	Phospholipid Metabolism	HMDB08047
Lipid	Phospholipid Metabolism	HMDB00564
Lipid	Phospholipid Metabolism	HMDB07988
Amino Acid	Polyamine Metabolism	HMDB01173
Lipid	Plasmalogen	HMDB05779
Lipid	Sphingolipid Metabolism	NA
Amino Acid	Tryptophan Metabolism	HMDB00197
Energy	TCA Cycle	HMDB00094
Amino Acid	Phenylalanine and Tyrosine Metabolism	HMDB11635
Lipid	Phospholipid Metabolism	NA
Carbohydrate	Pentose Metabolism	NA
Lipid	Sphingolipid Metabolism	NA
Amino Acid	Methionine, Cysteine, SAM and Taurine Metabolism	NA
Lipid	Sphingolipid Metabolism	HMDB12097
Amino Acid	Urea cycle; Arginine and Proline Metabolism	HMDB04620
Amino Acid	Tryptophan Metabolism	NA
Nucleotide	Purine Metabolism, (Hypo)Xanthine/Inosine containing	HMDB00292
Amino Acid	Glycine, Serine and Threonine Metabolism	HMDB02931
Energy	TCA Cycle	NA



Amino Acid	Urea cycle; Arginine and Proline Metabolism	HMDB01539
Amino Acid	Tryptophan Metabolism	HMDB00929
Amino Acid	Phenylalanine and Tyrosine Metabolism	HMDB06344
Amino Acid	Phenylalanine and Tyrosine Metabolism	HMDB00779
Nucleotide	Pyrimidine Metabolism, Uracil containing	HMDB00767
Nucleotide	Purine Metabolism, Guanine containing	HMDB04824
Amino Acid	Methionine, Cysteine, SAM and Taurine Metabolism	HMDB11745
Lipid	Plasmalogen	HMDB11220
Xenobiotics	Food Component/Plant	HMDB02994
Peptide	Dipeptide Derivative	HMDB00745
Lipid	Phospholipid Metabolism	HMDB07869
Xenobiotics	Food Component/Plant	HMDB00625
Nucleotide	Purine Metabolism, Adenine containing	HMDB03331
Lipid	Plasmalogen	HMDB05780
Lipid	Phospholipid Metabolism	HMDB07982
Amino Acid	Glycine, Serine and Threonine Metabolism	HMDB62557
Amino Acid	Alanine and Aspartate Metabolism	HMDB00168
Amino Acid	Lysine Metabolism	HMDB00070
Xenobiotics	Food Component/Plant	HMDB00956
Lipid	Phospholipid Metabolism	NA
Lipid	Phospholipid Metabolism	HMDB08048
Lipid	Steroid	HMDB02802
Lipid	Phospholipid Metabolism	HMDB00224
Lipid	Lysolipid	HMDB10382
Amino Acid	Alanine and Aspartate Metabolism	HMDB06028
Lipid	Phospholipid Metabolism	HMDB07973
Carbohydrate	Aminosugar Metabolism	HMDB00127
Lipid	Fatty Acid Synthesis	HMDB00691
Lipid	Lysolipid	HMDB02815
Lipid	Inositol Metabolism	HMDB00211
Carbohydrate	Fructose, Mannose and Galactose Metabolism	HMDB00247
Amino Acid	Methionine, Cysteine, SAM and Taurine Metabolism	HMDB00251
Cofactors and Vitamins	Pantothenate and CoA Metabolism	HMDB00210
Amino Acid	Alanine and Aspartate Metabolism	HMDB00766
Xenobiotics	Chemical	NA
Amino Acid	Glycine, Serine and Threonine Metabolism	HMDB00187
Amino Acid	Phenylalanine and Tyrosine Metabolism	HMDB00118
Cofactors and Vitamins	Ascorbate and Aldarate Metabolism	HMDB03290
Amino Acid	Leucine, Isoleucine and Valine Metabolism	HMDB00172
Carbohydrate	Glycolysis, Gluconeogenesis, and Pyruvate Metabolism	HMDB00122
Amino Acid	Lysine Metabolism	HMDB01325
Nucleotide	Purine Metabolism, (Hypo)Xanthine/Inosine containing	HMDB00462
Xenobiotics	Chemical	HMDB01448
Carbohydrate	Pentose Metabolism	HMDB00508
Amino Acid	Leucine, Isoleucine and Valine Metabolism	HMDB11757
Amino Acid	Alanine and Aspartate Metabolism	HMDB00161
Amino Acid	Glutathione Metabolism	HMDB00267
Energy	TCA Cycle	HMDB00208
Amino Acid	Phenylalanine and Tyrosine Metabolism	HMDB00159
Amino Acid	Glycine, Serine and Threonine Metabolism	HMDB00167

Nucleotide	Pyrimidine Metabolism, Cytidine containing	HMDB00014
Lipid	Plasmalogen	HMDB11352
Amino Acid	Urea cycle; Arginine and Proline Metabolism	HMDB00517
Lipid	Lysolipid	HMDB10384
Amino Acid	Histidine Metabolism	HMDB00177
Amino Acid	Leucine, Isoleucine and Valine Metabolism	HMDB61684
Amino Acid	Phenylalanine and Tyrosine Metabolism	HMDB00755
Amino Acid	Polyamine Metabolism	HMDB02064
Amino Acid	Urea cycle; Arginine and Proline Metabolism	HMDB00725
Amino Acid	Alanine and Aspartate Metabolism	HMDB00812
Amino Acid	Histidine Metabolism	HMDB00001
Amino Acid	Methionine, Cysteine, SAM and Taurine Metabolism	NA
Cofactors and Vitamins	Nicotinate and Nicotinamide Metabolism	HMDB00855
Amino Acid	Urea cycle; Arginine and Proline Metabolism	HMDB03374
Amino Acid	Glutamate Metabolism	HMDB00148
Amino Acid	Glutamate Metabolism	HMDB01138
Xenobiotics	Food Component/Plant	HMDB11749
Amino Acid	Urea cycle; Arginine and Proline Metabolism	HMDB00162
Amino Acid	Phenylalanine and Tyrosine Metabolism	HMDB01434
Amino Acid	Methionine, Cysteine, SAM and Taurine Metabolism	HMDB00574
Cofactors and Vitamins	Vitamin B6 Metabolism	HMDB00017
Amino Acid	Urea cycle; Arginine and Proline Metabolism	HMDB00904
Energy	TCA Cycle	HMDB00156
Carbohydrate	Glycolysis, Gluconeogenesis, and Pyruvate Metabolism	HMDB00139
Cofactors and Vitamins	Nicotinate and Nicotinamide Metabolism	HMDB00699
Nucleotide	Pyrimidine Metabolism, Uracil containing	NA
Amino Acid	Tryptophan Metabolism	HMDB00684
Nucleotide	Purine Metabolism, (Hypo)Xanthine/Inosine containing	HMDB00157
Amino Acid	Urea cycle; Arginine and Proline Metabolism	HMDB00052
Cofactors and Vitamins	Vitamin B6 Metabolism	HMDB01545
Nucleotide	Purine Metabolism, Adenine containing	HMDB00034
Amino Acid	Phenylalanine and Tyrosine Metabolism	HMDB00158
Xenobiotics	Bacterial/Fungal	HMDB35227
Lipid	Fatty Acid, Amino	NA
Amino Acid	Guanidino and Acetamido Metabolism	HMDB03464