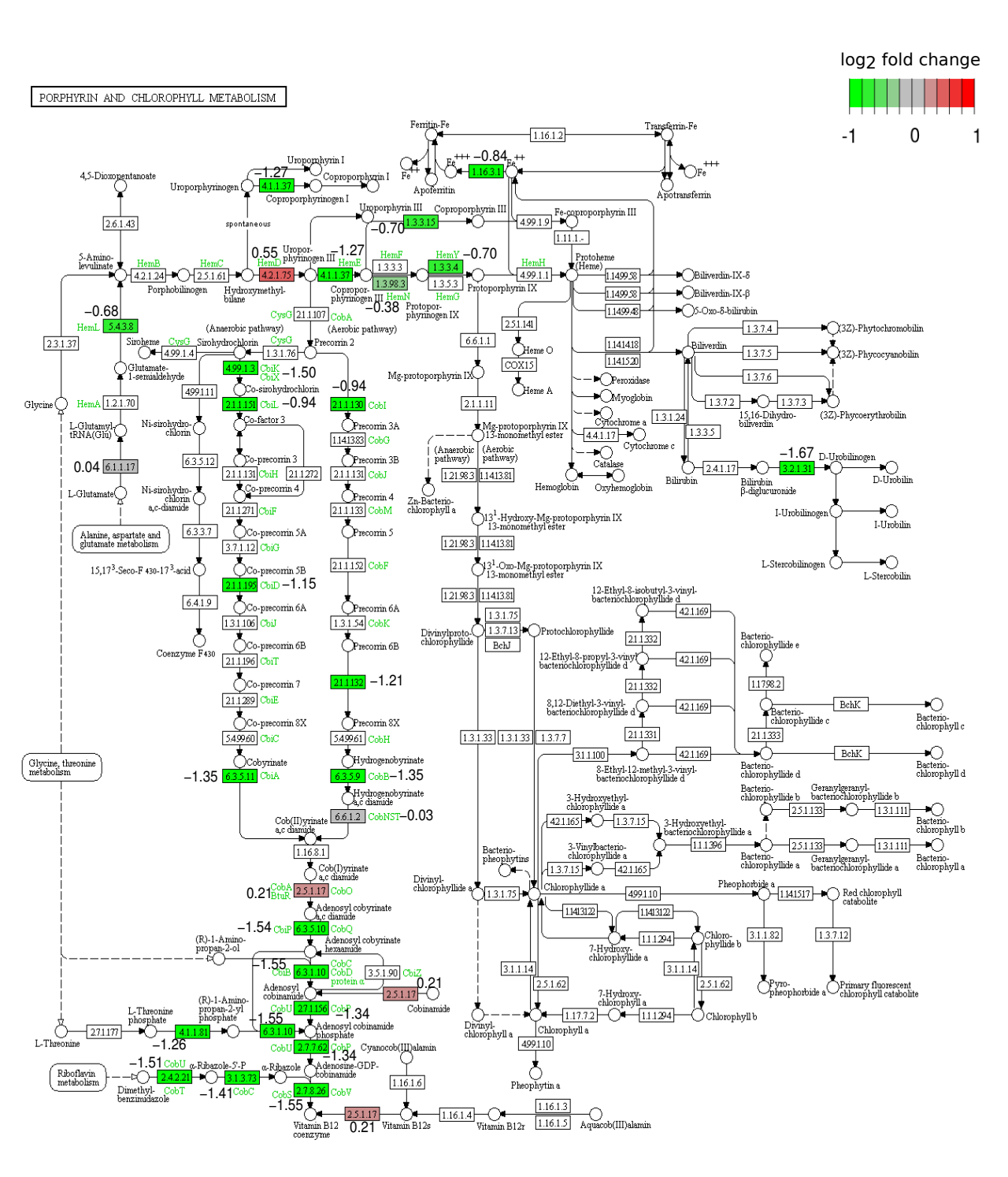
log2 fold change
-1
0
1
PORPHYRIN AND CHLOROPHYLL METABOLISM
Ferritin-Fe
Transferrin-Fe
Apoferritin
Apotransferrin
Uroporphyrinogen
Uroporphyrin I
Coproporphyrinogen I
Coproporphyrin I
Uroporphyrin III
Coproporphyrinogen III
Coproporphyrin III
Fe-coproporphyrin III
4,5-Dioxopentanoate
5-Amino-levulinate
Porphobilinogen
Hydroxymethyl-bilane
Uropor-phyrinogen III
Copropor-phyrinogen III
Protoporphyrin IX
Protoheme (Heme)
Protopor-phyrinogen IX
Biliverdin-IX-δ
Biliverdin-IX-β
5-Oxo-δ-bilirubin
Biliverdin
(3Z)-Phytochromobilin
(3Z)-Phycocyanobilin
15,16-Dihydro-biliverdin
(3Z)-Phycoerythrobilin
Heme O
Heme A
Peroxidase
Myoglobin
Cytochrome a
Cytochrome c
Catalase
Hemoglobin
Oxyhemoglobin
Bilirubin
Bilirubin β-diglucuronide
D-Urobilinogen
D-Urobilin
I-Urobilinogen
I-Urobilin
L-Stercobilinogen
L-Stercobilin
Mg-protoporphyrin IX
Mg-protoporphyrin IX 13-monomethyl ester
Zn-Bacterio-chlorophyll a
13¹-Hydroxy-Mg-protoporphyrin IX 13-monomethyl ester
3¹-Oxo-Mg-protoporphyrin IX 13-monomethyl ester
Divinylproto-chlorophyllide
Protochlorophyllide
12-Ethyl-8-isobutyl-3-vinyl-bacteriochlorophyllide d
12-Ethyl-8-propyl-3-vinyl-bacteriochlorophyllide d
8,12-Diethyl-3-vinyl-bacteriochlorophyllide d
8-Ethyl-12-methyl-3-vinyl-bacteriochlorophyllide d
Bacterio-chlorophyllide e
Bacterio-chlorophyllide c
Bacterio-chlorophyllide d
3-Hydroxyethyl-chlorophyllide a
3-Hydroxyethyl-bacteriochlorophyllide a
3-Vinylbacterio-chlorophyllide a
Bacterio-chlorophyllide b
Geranylgeranyl-bacteriochlorophyllide b
Geranylgeranyl-bacteriochlorophyllide a
Bacterio-pheophytins
Divinyl-chlorophyllide a
Chlorophyllide a
Pheophorbide a
Red chlorophyll catabolite
7-Hydroxy-chlorophyllide a
Chloro-phyllide b
Pyro-pheophorbide a
Primary fluorescent chlorophyll catabolite
Divinyl-chlorophyll a
Chlorophyll a
Chlorophyll b
Pheophytin a
Siroheme
Sirohydrochlorin
Precorrin 2
Glutamate-1-semialdehyde
Glycine
L-Glutamyl-tRNA(Glu)
L-Glutamate
Alanine, aspartate and glutamate metabolism
Ni-sirohydro-chlorin
Ni-sirohydro-chlorin a,c-diamide
Co-sirohydrochlorin
Co-factor 3
Co-precorrin 3
Co-precorrin 4
Co-precorrin 5A
Co-precorrin 5B
Co-precorrin 6A
Co-precorrin 6B
Co-precorrin 7
Co-precorrin 8X
Cobyrinate
Cob(II)yrinate a,c diamide
Cob(I)yrinate a,c diamide
Adenosyl cobyrinate a,c diamide
Adenosyl cobyrinate hexaamide
Adenosyl cobinamide
Adenosyl cobinamide phosphate
Cobinamide
Cyanocob(III)alamin
Adenosine-GDP-cobinamide
α-Ribazole
α-Ribazole-5'-P
Dimethyl-benzimidazole
Riboflavin metabolism
Vitamin B12 coenzyme
Vitamin B12s
Vitamin B12r
Aquacob(III)alamin
Precorrin 3A
Precorrin 3B
Precorrin 4
Precorrin 5
Precorrin 6A
Precorrin 6B
Precorrin 8X
Hydrogenobyrinate
Hydrogenobyrinate a,c diamide
Coenzyme F430
15,17³-Seco-F 430-17³-acid
Glycine, threonine metabolism
L-Threonine
L-Threonine phosphate
(R)-1-Amino-propan-2-ol
(R)-1-Amino-propan-2-yl phosphate
spontaneous
(Anaerobic pathway)
(Aerobic pathway)
HemB
HemC
HemD
HemE
HemF
HemY
HemH
HemL
HemN
HemG
CysG
CbiK
CbiX
CbiL
CbiH
CbiF
CbiG
CbiD
CbiJ
CbiT
CbiE
CbiC
CbiA
CbiH
CbiJ
CbiK
CbiG
CbiD
CbiT
CbiE
CbiC
CbiA
CobA
CobI
CobG
CobJ
CobM
CobF
CobK
CobH
CobA
CobN
CobS
CobT
CobC
CobU
CobP
CobV
CobB
CobO
CobQ
CobC
CobD
CobB
CbiZ
CobU
CobP
HemA
BchJ
BchK
COX15
4.2.1.24
2.5.1.61
4.2.1.75
4.1.1.37
1.3.3.3
1.3.98.3
1.3.3.4
1.3.5.3
4.99.1.1
1.14.99.58
1.14.99.48
1.14.14.18
1.14.15.20
1.3.7.4
1.3.7.5
1.3.7.6
1.3.7.2
1.3.7.3
1.3.1.24
1.3.3.5
2.4.1.17
3.2.1.31
2.5.1.141
6.6.1.1
2.1.1.11
4.4.1.17
1.21.98.3
1.14.13.81
1.3.1.75
1.3.7.13
2.1.1.332
42.1.169
1.1.798.2
2.1.1.333
1.3.1.33
1.3.7.7
3.1.1.100
2.5.1.133
1.3.1.111
42.1.165
1.3.7.15
1.1.1.396
1.14.13.122
1.1.1.294
3.1.1.14
2.5.1.62
1.3.7.12
1.17.7.2
4.99.1.10
1.14.15.17
2.7.1.177
4.1.1.81
6.3.1.10
2.7.7.62
1.16.8.1
1.16.1.6
2.4.2.21
2.1.3.73
2.7.8.26
2.5.1.17
1.16.1.4
1.16.1.3
1.16.1.5
6.3.3.7
3.7.1.12
6.4.1.9
6.3.5.12
6.3.5.11
6.3.5.9
6.6.1.2
6.3.5.10
3.5.1.90
6.1.1.17
1.2.1.70
2.3.1.37
4.99.1.4
4.99.1.3
4.99.1.11
2.1.1.151
2.1.1.271
2.1.1.289
5.4.99.60
5.4.99.61
2.1.1.130
2.1.1.131
2.1.1.133
2.1.1.152
1.3.1.54
2.1.1.132
1.3.1.106
2.1.1.196
2.1.1.272
1.141383
1.21.98.3
1.14.13.81
2.6.1.43
5.4.3.8
1.16.3.1
1.11.1.-
4.99.1.9
1.3.3.15
spontaneous
0.55
−1.27
−1.27
−0.70
−0.70
−0.84
−0.68
−0.38
−1.50
−0.94
−0.94
−1.15
−1.21
−1.35
−1.35
−0.03
0.21
−1.54
−1.55
0.21
−1.34
1.55
−1.26
−1.51
−1.41
−1.55
0.21
−1.67
0.04