Supplementary Table 11 Enzymes incorporated in metabolic model but not identified in the genome

1	2-aminoadipate transaminase*
2	2-Dehydro-3-deoxy-D-galactonate aldolase
3	2-keto-3-deoxygluconate aldolase*
4	2-methylisocitrate dehydratase*
5	2-Phenylacetate 5-hydroxylase
6	4-hydroxybenzaldehyde dehydrogenase
7	4-hydroxybenzoate 3-hydroxylase
8	4-hydroxybenzoylformic acid decarboxylase
9	4-hydroxymandelate dehydrogenase
10	4-hydroxyphenylacetic acid monoxygenase
11	Acylglycerol lipase
12	Alanine dehydrogenase (NADPH)*
13	Allophanate hydrolase*
14	Aminocarboxymuconate-semialdehyde decarboxylase
15	Aminodeoxychorismate synthase*
16	Aminomuconate-semialdehyde dehydrogenase
17	Anthranilate 3-monooxygenase (deaminating)
18	Aspartate alpha-decarboxylase
19	B-ketoacyl-ACP synthase (c10,0)
20	Choline sulfotransferase*
21	Chorismate synthase*
22	CMP glycosylase*
23	Cystine reductase
24	DephosphoCoA kinase
25	Dethiobiotin synthetase
26	D-Sorbitol dehydrogenase (acceptor)*
27	Erythrose 4-phosphate phosphatase
28	Erythrose dehydrogenase
29	Erythrose reductase
30	Erythrulose kinase
31	Galactolipid galactosyltransferase
32	Galactose 1-dehydrogenase
33	Gluconate dehydratase*
34	Glutamate synthase (NADPH)*
35	Histamine N-acetyltransferase

36	Histidine decarboxylase
37	Holo-[acyl-carrier-protein] synthase
38	Homoisocitrate dehydrogenase*
39	Hydroxyisourate hydrolase*
40	Inosine diphosphatase*
41	Inosine kinase*
42	Ketotetrose-phosphate aldolase
43	Kynurenine 3-hydroxylase
44	Lactaldehyde dehydrogenase
45	Mannitol kinase*
46	Mannitol-1-phosphatase*
47	Methylglyoxal reductase (MGR I)
48	Methylglyoxal reductase (MGR II)
49	Phenylacetate 2-hydroxylase
50	Phenylacetate hydroxylase
51	Phenylpyruvate decarboxylase
52	Phosphatidate phosphatase
53	Phosphatidylglycerophosphatase*
54	Phospho-pantethiene adenylyltransferase
55	Phosphopantothenate-cysteine decarboxylase
56	Phosphopantothenate-cysteine ligase
57	Pyruvate oxidase*
58	Ribulose reductase*
59	Spermidine dehydrogenase*
60	Spermine synthase*
61	Stearoyl-CoA 15-desaturase*
62	Sulfur dioxygenase
63	Tartrate dehydratase
64	UDPgalactose:1,2-diacylglycerol 3-beta-D-galactosyltransferase
65	UDP-N-acetylglucosamine 4-epimerase

* Enzymes from central metabolism.