Table S8. L. monocytogenes
 EGDe genes involved in metabolism and differentially regulated in the host

Gene designation Gene Annotation

Genes up-regulated in vivo		
Imo0011	lmo0011	similar to mevalonate diphosphate decarboxylase
lmo0012	Imo0012	similar to mevalonate kinases
purA	Imo0055	highly similar to adenylosuccinate synthetase
Imo0098 Imo0153	lmo0098 lmo0153	similar to PTS system mannose-specific, factor IID similar to a probable high-affinity zinc ABC transporter (Zn(II)-binding lipoprotein)
lmo0169	lmo0155	similar to a glucose uptake protein
plcA	lmo0201	phosphatidylinositol-specific phospholipase c
plcB	lmo0205	phospholipase C
sul	lmo0224	highly similar to dihydropteroate synthases
folA folK	lmo0225 lmo0226	highly similar to dihydroneopterin aldolase similar to 7,8-dihydro-6-hydroxymethylpterin pyrophosphokinase
lmo0231	lmo0231	similar to arginine kinase
lmo0265	Imo0265	similar to succinyldiaminopimelate desuccinylase
lmo0278	lmo0278	similar to sugar ABC transporter, ATP-binding protein
Imo0279 Imo0280	Imo0279 Imo0280	highly similar to anaerobic ribonucleoside-triphosphate reductase highly similar to anaerobic ribonucleotide reductase activator protein
lmo0301	lmo0301	similar to PTS beta-glucoside-specific enzyme IIA component
lmo0366	lmo0366	conserved hypothetical protein, putative lipoprotein
lmo0541	lmo0541	similar to ABC transporter (binding protein)
lmo0580	Imo0580	weakly similar to carboxylesterase
Imo0593 Imo0594	Imo0593 Imo0594	similar to transport proteins (formate?) similar to homoserine O-acetyltransferase
Imo0607	Imo0607	similar to ABC transporter, ATP-binding protein
Imo0608	Imo0608	similar to ABC transporter, ATP-binding protein
lmo0645	Imo0645	similar to amino acid transporter
lmo0650 thiD	Imo0650 Imo0662	conserved membrane protein highly similar to phosphomethylpyrimidine kinase thiD
Imo0781	lmo0781	similar to mannose-specific phosphotransferase system (PTS) component IID
lmo0782	lmo0782	similar to mannose-specific phosphotransferase system (PTS) component IIC
lmo0783	Imo0783	similar to mannose-specific phosphotransferase system (PTS) component IIB
Imo0784	lmo0784	similar to mannose-specific phosphotransferase system (PTS) component IIA
uhpT Imo0841	lmo0838 lmo0841	highly similar to hexose phosphate transport protein similar to cation (calcium) transporting ATPase
Imo0848	Imo0841	similar to amino acid ABC transporter, ATP-binding protein
lmo0876	lmo0876	similar to PTS system, Lichenan-specific enzyme ITC component
lmo0915	lmo0915	similar to phosphotransferase system enzyme IIC
lmo0970	lmo0970	similar to enoyl- acyl-carrier protein reductase
lmo0978 ptsH	lmo0978 lmo1002	similar to branched-chain amino acid aminotransferase PTS phosphocarrier protein Hpr (histidine containing protein)
lmo1003	lmo1002	phosphotransferase system enzyme I
lmo1006	lmo1006	similar to aminotransferases (to B. subtilis PatA protein)
lmo1011	lmo1011	similar to tetrahydrodipicolinate succinylase
lmo1086	lmo1086	similar to CDP-ribitol pyrophosphorylase
lmo1087 lmo1093	lmo1087 lmo1093	similar to glucitol dehydrogenase similar to NH(3)-dependent NAD(+) synthetases, nitrogen regulatory protein
guaA	lmo1096	highly similar to GMP synthetase
lmo1207	lmo1207	similar to cobalt transport ATP-binding protein CbiO
lmo1250	lmo1250	similar to antibiotic resistance protein
glnA	lmo1299 lmo1354	highly similar to glutamine synthetases
lmo1354 tcsA	lmo1334	similar to aminopeptidase P CD4+ T cell-stimulating antigen, lipoprotein
lmo1424	lmo1424	similar to manganese transport proteins NRAMP
opuCD	lmo1425	similar to betaine/carnitine/choline ABC transporter (membrane p)
lmo1431	lmo1431	similar to ABC transporter (ATP-binding protein)
udk Imo1536	lmo1497 lmo1536	similar to Uridine kinase similar to prephenate dehydratase PheA
lmo1578	lmo1578	similar to X-Pro dipeptidase
lmo1592	lmo1592	similar to thiamin biosynthesis protein ThiI
aroA_	lmo1600	3-deoxy-D-arabino-heptulosonate 7-phosphate synthase
menD	lmo1675	similar to 2-succinyl-6-hydroxy-2,4-cyclohexadiene-1-carboxylate synthase / 2-oxoglutarate decarboxylase
Imo1677 Imo1705	lmo1677 lmo1705	similar to menaquinone biosynthesis proteins similar to deoxyguanosine kinase/deoxyadenosine kinase(I) subunit
lmo1711	lmo1711	highly similar to aminopeptidases
adeC	lmo1742	highly similar to adenine deaminases
lmo1761	lmo1761	similar to putative sodium-dependent transporter
purD Imo1780	lmo1764 lmo1780	phosphoribosylglycinamide synthetase similar to aminotripeptidase (peptidase T)
lmo1847	lmo1847	similar to adhesion binding proteins and lipoproteins with multiple specificity for metal cations (ABC transporter)
lmo1848	lmo1848	similar metal cations ABC transporter (permease protein)
lmo1849	lmo1849	similar to metal cations ABC transporter, ATP-binding proteins
ilvN	lmo1985	similar to acetolactate synthase (acetohydroxy-acid synthase) (small subunit)
nadC nadA	lmo2024 lmo2025	similar to nicotinate-nucleotide pyrophosphorylase similar to quinolinate synthetase
ctaA	lmo2058	similar to heme O oxygenase
lmo2077	lmo2077	similar to glycoprotease
lmo2101	lmo2101	similar to a protein required for pyridoxine synthesis
lmo2114	lmo2114	similar to ABC transporter (ATP-binding protein) similar to ABC transporter (permease)
lmo2115 lmo2154	lmo2115 lmo2154	similar to ABC transporter (permease) similar to ribonucleoside-diphosphate reductase, subunit beta
lmo2155	lmo2155	similar to ribonucleoside-diphosphate reductase, subunit alpha
lmo2182	lmo2182	similar to ferrichrome ABC transporter (ATP-binding protein)
lmo2184	lmo2184	similar to ferrichrome ABC transporter (binding protein)
lmo2188 lmo2192	lmo2188 lmo2192	similar to oligoendopeptidase similar to oligopeptide ABC transporter (ATP-binding protein)
lmo2193	lmo2193	similar to oligopeptide ABC transporter (ATP-binding protein)
lmo2194	lmo2194	similar to oligopeptide ABC transporter (permease)
lmo2195	lmo2195	similar to oligopeptide ABC transporter (permease)
lmo2196	lmo2196	similar to pheromone ABC transporter (binding protein)
lmo2201 lmo2202	lmo2201 lmo2202	similar to 3-oxoacyl-acyl-carrier protein synthase similar to 3-oxoacyl- acyl-carrier protein synthase
hemH	lmo2211	similar to 6 sheacy), days carrier process systemes

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similar to ABC transporter (ATP-binding protein) similar to amino acid ABC transporter (ATP-binding protein)
lmo2215
                   Imo2215
lmo2251
                   lmo2251
lmo2413
                   lmo2413
                                 similar to aminotransferase
Imo2414
                   Imo2414
                                 similar to aminotransferase
lmo2415
                   lmo2415
                                 similar to ABC transporter, ATP-binding protein
Imo2503
                   Imo2503
                                 similar to cardiolipin synthase
                                 highly similar to ABC transporter (ATP-binding protein) required for expression of cytochrome BD
                   lmo2715
cydD
.
Imo2770
                   lmo2770
                                 similar to gamma-glutamylcysteine synthetase (N_terminal part) and to cyanophycin synthetase (C-terminal part)
Genes down-regulated in vivo
                                 similar to PTS system, fructose-specific IIC component
Imo0023
                   Imo0023
Imo0024
                   Imo0024
                                 similar to PTS system, mannose-specific IID component
Imo0033
                   Imo0033
                                 similar to endoglucanase
lmo1142
                   lmo1142
                                 similar to Salmonella enterica PduS protein
                                 similar to Salmonella enterica PduT protein similar to Salmonelle enterica PduU protein
lmo1143
                   lmo1143
lmo1144
                   lmo1144
lmo1145
                   lmo1145
                                 similar to Salmonella enterica PduV protein
lmo1147
                   lmo1147
                                 similar to bifunctional cobalamin biosynthesis protein CopB
                                 highly similar to cobalamin (5'-phosphatase) synthetase
lmo1148
                   lmo1148
                                 similar to alpha-ribazole-5'-phosphatase
similar to Salmonella typhimurium PduA protein
lmo1149
                   lmo1149
lmo1151
                   lmo1151
lmo1152
                   lmo1152
                                 similar to Salmonella typhimurium PduB protein
                   lmo1153
                                 highly similar to propanediol dehydratase, alpha subunit
lmo1153
                   lmo1154
                                 similar to diol dehydrase (diol dehydratase) gamma subunit
lmo1154
lmo1156
                   lmo1156
                                 similar to diol dehydratase-reactivating factor large subunit
lmo1157
                   lmo1157
                                 similar to diol dehydratase-reactivating factor small chain
lmo1158
                   lmo1158
                                 similar to Salmonella enterica PduK protein
lmo1159
                   lmo1159
                                 similar to carboxysome structural protein
lmo1160
                   lmo1160
                                 similar to Salmonella enterica PduL protein
                                 similar to ethanolamine utilization protein Eut1
lmo1161
                   lmo1161
lmo1164
                   lmo1164
                                 hyghly similar to Salmonella enterica PduO prote
lmo1165
                   lmo1165
                                 similar to ethanolamine utilization protein EutE similar to NADPH-dependent butanol dehydroger
lmo1166
                   lmo1166
glpF
AckA2
                   lmo1167
                                 similar to glycerol uptake facilitator protein
                                 similar to acetate kinase
                   lmo1168
                                 similar to Salmonella typhimurium CobD protein and to histidinol-phosphate aminotransferase similar to NADPH-dependent butanol dehydrogenase
cobD
                   lmo1169
                   lmo1171
pduQ
                                 similar to two-component sensor histidine kinase
lmo1173
                   lmo1173
                                 similar to ethanolamine utilization protein EutA (putative chaperonin) similar to ethanolamine ammonia-lyase, heavy chain
eutA
                   Imo1174
                   lmo1175
eutB
eutC
                   lmo1176
                                 similar to ethanolamine ammonia-lyase, light chain
lmo1177
                   lmo1177
                                 similar to putative carboxysome structural protein (eutL)
lmo1180
                   lmo1180
                                 similar to putative carboxysome structural protein
lmo1181
                   lmo1181
                                 similar to cobalamin adenosyl transferase
lmo1182
                   lmo1182
                                 similar to Salmonella enterica PduL protein
cbiA
                   lmo1191
                                 similar to cobyrinic acid a,c-diamide synthase similar to cobalamine synthesis protein CbiB
lmo1192
                   lmo1192
                                 similar to cobalamin biosynthesis protein CbiD some similarities to cellobiose-phosphorylase
chiD
                   lmo1194
lmo1728
                   lmo1728
lmo1812
                   lmo1812
                                 similar to L-serine dehydratase
                                 weakly similar to thiamin pyrophosphokinase
lmo1817
                   lmo1817
lmo1818
                   lmo1818
                                 similar to ribulose-5-phosphate 3-epimerase (PPP)
                                 similar to pantothenate metabolism flavoprotein homolog
highly similar to orotate phosphoribosyltransferases
lmo1825
                   lmo1825
                   lmo1831
pyrE
pyrF
                   lmo1832
                                 highly similar to orotidine 5'-phosphate decarboxylases
                                 highly similar to dihydroorotase dehydrogenase
                   lmo1833
pvrD
pyrDII
                    lmo1834
                                 highly similar to dihydroorotate dehydrogenase (electron transfer subunit)
pvrAB
                   lmo1835
                                 highly similar to carbamoyl-phosphate synthetase (catalytic subunit)
pyrAa
                   lmo1836
                                 highly similar to carbamoyl-phosphate synthetase (glutaminase subunit)
pyrC
pyrP
                   lmo1837
                                 highly similar to dihydroorotase
highly similar to uracil permease
                   lmo1839
lmo1851
                   lmo1851
                                 similar to carboxy-terminal processing proteinase
lmo1871
                   lmo1871
                                 similar to phosphoglucomutases
lmo1883
                   lmo1883
                                 similar to chitinases
lmo2175
                   lmo2175
                                 similar to dehydrogenase
Imo2425
                   lmo2425
                                 similar to glycine cleavage system protein H
                                 similar to formate dehydrogenase alpha chain similar to Phosphotriesterase
Imo2586
                   Imo2586
Imo2648
                   Imo2648
Imo2649
Imo2657
                   Imo2649
Imo2657
                                 similar to hypothetical PTS enzyme IIC component similar to dGTP triphosphohydrolase
Imo2660
                   Imo2660
                                 similar to transketolase (PPP)
lmo2661
                   lmo2661
                                 similar to ribulose-5-phosphate 3-epimerase (PPP)
                                 similar to ribose 5-phosphate epimerase (PPP)
Imo2662
                   Imo2662
Imo2663
                   Imo2663
                                 similar to polyol dehydrogenase
similar to sorbitol dehydrogenase
Imo2664
                   Imo2664
                                 similar to PTS system galactitol-specific enzyme IIC component similar to ribose 5-phosphate epimerase (PPP)
Imo2665
                   Imo2665
Imo2674
                   Imo2674
                   lmo2681
                                 potassium-transporting atpase b chain
kdpB
                                 similar to PTS system, fructose-specific IIABC component
lmo2733
                   Imo2733
                   lmo2741
                                 similar to drug-efflux transporters
lmo2741
lmo2761
                   lmo2761
                                 similar to beta-glucosidase
                                 similar to PTS cellobiose-specific enzyme IIC
Imo2763
                   Imo2763
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