

Table S1. Microarray analysis of MogR-negative *L. monocytogenes* relative to wild-type during growth in different conditions.

	37°C	37°C	RT	
	J774	BHI	BHI	
<i>lmo0019</i>	*-1.1	3.7	3.2	unknown
<i>lmo0036</i>	*2.1	*1.8	-9.5	similar to ornithine carbamoyltransferase
<i>lmo0043</i>	*-1.1	2.1	5.5	similar to arginine deiminase
<i>lmo0093</i>	*1.2	*-1.3	4.8	similar to ATP synthase epsilon chain
<i>lmo0157</i>	*-1.5	-9.9	*1.3	similar to ATP dependent helicase
<i>lmo0178</i>	*-1.1	-3.6	-4.9	similar to xylose repressor
<i>lmo0179</i>	*-1.1	-4.1	-5.0	similar to sugar ABC transporters, permease proteins
<i>lmo0181</i>	*1.6	-4.9	-3.2	similar to sugar ABC transporter, sugar-binding protein
<i>lmo0202</i>	*1.1	*1.8	-7.3	listeriolysin O precursor
<i>lmo0254</i>	*1.2	*1.2	-4.7	unknown
<i>lmo0262</i>	*-1.5	4.0	*1.1	internalin G
<i>lmo0278</i>	*1.1	*-1.3	-4.4	similar to sugar ABC transporter, ATP-binding protein
<i>lmo0279</i>	*-1.3	-4.0	*-1.2	highly similar to anaerobic ribonucleoside-triphosphate reductase
<i>lmo0280</i>	*-1.1	-3.8	-2.1	highly similar to anaerobic ribonucleotide reductase activator protein
<i>lmo0300</i>	*1.3	*-1.5	-3.8	similar to phospho-beta-glucosidase and phospho-beta-galactosidase
<i>lmo0321</i>	*1.2	*-1.1	5.0	similar to unknown proteins
<i>lmo0322</i>	*1.3	*2.3	4.0	similar to unknown proteins
<i>lmo0327</i>	*1.1	*-1.1	-7.1	similar to cell surface proteins (LPXTG motif)
<i>lmo0343</i>	*1.4	*-1.5	-7.8	similar to transaldolase
<i>lmo0344</i>	*1.3	*-1.3	-12.1	similar to dehydrogenase/reductase
<i>lmo0345</i>	*1.1	*-2.0	-4.1	similar to sugar-phosphate isomerase
<i>lmo0347</i>	*1.5	*1.1	-11.2	similar to dihydroxyacetone kinase
<i>lmo0372</i>	*-1.2	*-1.3	-4.1	similar to beta-glucosidase
<i>lmo0377</i>	*1.2	*-1.1	-3.7	unknown
<i>lmo0393</i>	*-1.1	-2.2	-4.1	unknown
<i>lmo0398</i>	*1.6	9.9	-8.2	similar to phosphotransferase system enzyme IIA
<i>lmo0399</i>	*1.3	*2.4	-7.4	similar to fructose-specific phosphotransferase enzyme IIB
<i>lmo0400</i>	*1.2	14.5	-8.7	similar to fructose-specific phosphotransferase enzyme IIC
<i>lmo0401</i>	*1.5	*1.8	-7.0	highly similar to <i>E. coli</i> YbgG protein, a putative sugar hydrolase
<i>lmo0406</i>	*-1.1	2.8	4.4	similar to <i>B. subtilis</i> YyaH protein
<i>lmo0444</i>	*1.1	-3.6	-2.3	conserved hypothetical protein
<i>lmo0469</i>	*-1.5	*1.0	3.7	unknown
<i>lmo0495</i>	*1.1	-7.3	*-1.4	similar to transmembrane protein
<i>lmo0498</i>	*1.2	*-1.4	-10.9	similar to ribose 5-phosphate isomerase
<i>lmo0536</i>	*1.2	*-1.6	-3.9	similar to 6-phospho-beta-glucosidase
<i>lmo0554</i>	*1.3	*-1.2	5.3	similar to NADH-dependent butanol dehydrogenase
<i>lmo0589</i>	*-1.1	*1.5	4.1	unknown
<i>lmo0611</i>	*-1.0	*1.2	3.6	similar to acyl-carrier protein phosphodiesterase and NAD(P)H dehydrogenase
<i>lmo0643</i>	*-1.1	*1.1	-3.8	similar to putative transaldolase
<i>lmo0655</i>	*-1.2	*1.2	4.2	similar to phosphoprotein phosphatases
<i>lmo0670</i>	*-1.6	5.7	-1.2	unknown

<i>lmo0672</i>	*1.2	*1.7	4.0	similar to unknown protein
<i>lmo0673</i>	4.3	4.4	5.8	unknown
<i>lmo0675</i>	*1.4	4.5	*-1.1	similar to flagellar switch protein FliN
<i>lmo0677</i>	*1.7	5.1	2.9	similar to flagellar biosynthesis protein FliQ
<i>lmo0678</i>	2.5	*6.9	6.7	similar to flagellar biosynthetic protein FliR
<i>lmo0679</i>	8.4	100.0	4.5	similar to flagellar biosynthetic protein FlhB
<i>lmo0680</i>	5.8	5.8	*1.3	similar to flagella-associated protein FlhA
<i>lmo0682</i>	2.5	9.6	*-1.2	similar to flagellar hook-basal body protein FlgG
<i>motA</i>	3.8	4.4	2.0	similar to motility protein (flagellar motor rotation) MotA
<i>motB</i>	*4.7	6.4	*-1.3	similar to motility protein (flagellar motor rotation) MotB
<i>lmo0687</i>	5.6	10.3	*-1.2	unknown
<i>lmo0688</i>	15.8	1.3	2.4	similar to unknown protein
<i>lmo0689</i>	5.5	13.1	-2.1	similar to CheA activity-modulating chemotaxis protein CheV
<i>flaA</i>	84.1	63.2	*1.1	flagellin protein
<i>cheY</i>	9.0	6.2	3.6	chemotaxis response regulator CheY
<i>cheA</i>	17.5	14.0	2.0	two-component sensor histidine kinase CheA
<i>lmo0693</i>	23.2	100.0	2.0	similar to flagellar motor switch protein FliY C-terminal part
<i>lmo0694</i>	14.5	25.5	2.9	unknown
<i>lmo0695</i>	20.0	16.7	*2.1	unknown
<i>lmo0696</i>	12.9	25.2	3.2	similar to flagellar hook assembly protein
<i>lmo0697</i>	30.9	29.7	2.1	similar to flagellar hook protein FlgE
<i>lmo0698</i>	19.8	26.3	*1.2	weakly similar to flagellar switch protein
<i>lmo0699</i>	100.0	100.0	1.6	similar to flagellar switch protein FliM
<i>lmo0700</i>	12.4	18.8	1.9	similar to flagellar motor switch protein FliY
<i>lmo0701</i>	5.8	*4.5	3.1	unknown
<i>lmo0702</i>	11.9	81.0	3.3	unknown
<i>lmo0703</i>	38.7	50.1	4.0	unknown
<i>lmo0704</i>	9.1	67.3	2.2	unknown
<i>lmo0705</i>	50.2	58.6	5.6	similar to flagellar hook-associated protein FlgK
<i>lmo0706</i>	14.3	34.7	*1.8	similar to flagellar hook-associated protein 3 FlgL
<i>lmo0707</i>	53.9	100.0	7.1	similar to flagellar hook-associated protein 2 FliD
<i>lmo0708</i>	28.3	34.0	*1.4	similar to hypothetical flagellar protein
<i>lmo0709</i>	28.1	37.2	1.6	unknown
<i>lmo0710</i>	20.7	12.0	1.7	similar to flagellar basal-body rod protein FlgB
<i>lmo0711</i>	18.7	9.0	1.7	similar to flagellar basal-body rod protein FlgC
<i>lmo0712</i>	18.7	43.4	1.7	similar to flagellar hook-basal body complex protein FliE
<i>lmo0713</i>	27.9	5.2	2.9	similar to flagellar basal-body M-ring protein FliF
<i>lmo0714</i>	15.5	13.5	1.9	similar to flagellar motor switch protein FliG
<i>lmo0715</i>	7.2	3.2	*1.3	unknown
<i>lmo0716</i>	11.1	3.7	*1.7	similar to H ⁺ -transporting ATP synthase alpha chain FliI, flagellar-specific
<i>lmo0717</i>	9.0	*3.1	3.2	similar to transglycosylase
<i>lmo0723</i>	9.3	45.6	7.6	similar to methyl-accepting chemotaxis protein
<i>lmo0724</i>	13.1	36.8	5.6	similar to <i>B. subtilis</i> YvpB protein
<i>lmo0736</i>	*-1.0	*1.2	-18.4	similar to ribose 5-phosphate isomerase
<i>lmo0813</i>	*1.1	*-1.4	-3.6	similar to fructokinases
<i>lmo0852</i>	*1.4	*-1.5	5.9	similar to transcription regulator TetR/AcrR family

<i>lmo0869</i>	*1.1	3.6	*-8.7	unknown
<i>lmo0903</i>	*-1.2	1.2	4.2	conserved hypothetical protein
<i>lmo0914</i>	*1.4	4.2	*3.4	similar to PTS system, IIB component
<i>lmo1042</i>	*1.2	*1.4	-5.9	similar to molybdopterin biosynthesis protein MoeA
<i>lmo1043</i>	*1.1	*1.4	-4.7	similar to molybdopterin-guanine dinucleotide biosynthesis MobB
<i>lmo1044</i>	*1.5	1.9	-4.2	similar to molybdopterin converting factor, subunit 2
<i>lmo1064</i>	-1.8	*1.4	3.7	similar to membrane and transport proteins
<i>lmo1123</i>	*-1.3	*1.0	3.9	unknown
<i>lmo1129</i>	*-1.2	*-1.0	-18.5	similar to unknown proteins
<i>lmo1150</i>	*-1.1	2.1	-5.1	similar to <i>S. typhimurium</i> regulatory protein PocR
<i>lmo1186</i>	*-100	*-1.8	-7.8	similar to <i>E. coli</i> ethanolamine utilization protein EutH
<i>lmo1202</i>	*1.5	*1.1	-3.7	similar to anaerobic cobalt chelatase in cobalamin biosynthesis
<i>lmo1254</i>	*-1.1	*1.2	-4.5	similar to alpha, alpha-phosphotrehalase
<i>lmo1256</i>	*1.1	*1.2	-5.1	unknown
<i>lmo1261</i>	*-1.2	*1.1	6.4	unknown
<i>lmo1266</i>	*-1.3	*2.5	11.2	unknown
<i>lmo1298</i>	1.2	*-1.4	4.1	similar to glutamine synthetase repressor
<i>lmo1310</i>	*-1.2	*-1.6	5.7	similar to <i>E. coli</i> YbdN protein
<i>lmo1369</i>	*-1.2	*-1.0	3.7	similar to phosphotransbutyrylase
<i>lmo1395</i>	*-1.1	*1.3	3.6	similar to unknown protein
<i>lmo1424</i>	*-1.1	*1.4	4.2	similar to manganese transport proteins NRAMP
<i>lmo1428</i>	*-1.3	*-1.2	3.5	similar to glycine betaine/carnitine/choline ABC transporter (ATP-binding protein)
<i>lmo1527</i>	*-1.3	*-1.5	3.9	similar to protein-export membrane protein SecDF
<i>lmo1536</i>	*1.0	*1.1	3.7	similar to prephenate dehydratase PheA
<i>lmo1545</i>	*-1.3	*1.1	4.5	similar to cell-division inhibition (septum placement) protein MinC
<i>comC</i>	-100.0	-100.0	*7.1	similar to <i>B. subtilis</i> late competence protein ComC (type IV prepilin peptidase)
<i>lmo1556</i>	*-1.1	*-1.1	3.6	highly similar to porphobilinogen deaminases (hydroxymethylbilane synthase)
<i>lmo1557</i>	-1.3	*-1.2	3.8	highly similar to glutamyl-tRNA reductase
<i>lmo1685</i>	*-1.1	*1.1	-4.3	glutamate-1-semialdehyde aminotransferase
<i>lmo1699</i>	3.7	36.3	6.9	some similarities to methyl-accepting chemotaxis proteins
<i>lmo1700</i>	2.7	4.1	9.7	unknown
<i>lmo1715</i>	1.4	*1.5	-4.0	similar to hypothetical proteins
<i>lmo1718</i>	*1.1	*-1.1	-3.9	similar to putative outer surface protein
<i>lmo1730</i>	*-1.1	*1.7	-8.3	similar to sugar ABC transporter binding protein
<i>lmo1732</i>	*1.1	*1.4	-3.7	similar to sugar ABC transporter, permease protein
<i>lmo1749</i>	*-1.2	*-1.3	8.5	similar to shikimate kinase
<i>lmo1755</i>	*-1.1	*-1.3	3.5	glutamyl-tRNA(Gln) amidotransferase (subunit A)
<i>lmo1790</i>	*1.0	5.7	*1.9	similar to unknown proteins
<i>lmo1810</i>	*-1.1	*1.2	4.8	similar to unknown proteins
<i>lmo1815</i>	*-1.2	*1.1	4.3	similar to unknown protein
<i>lmo1838</i>	*-1.1	*-1.3	4.0	highly similar to aspartate carbamoyltransferase
<i>lmo1852</i>	*-1.1	-1.6	-4.1	similar to putative mercuric ion binding proteins
<i>lmo1883</i>	*1.0	-1.4	-3.7	similar to chitinases
<i>lmo1912</i>	*-1.3	*1.8	5.6	similar to unknown proteins (hypothetical sensory transduction histidine kinase)
<i>lmo1931</i>	*1.4	*1.4	4.4	similar to 2-heptaprenyl-1,4-naphthoquinone methyltransferase
<i>lmo1933</i>	*-1.1	*1.1	4.0	similar to GTP cyclohydrolase I

<i>lmo1999</i>	*1.1	*-1.5	-35.8	weakly similar to glucosamine-fructose-6-phosphate aminotransferase
<i>lmo2001</i>	*-1.7	*1.3	-5.4	similar to PTS mannose-specific enzyme IIC component
<i>lmo2002</i>	*1.3	*-1.2	-8.1	similar to PTS mannose-specific enzyme IIB component
<i>lmo2004</i>	*1.1	*-1.1	-5.2	similar to transcription regulator GntR family
<i>lmo2046</i>	*1.4	*-1.0	4.1	weakly similar to ketopantoate reductase involved in thiamin biosynthesis
<i>lmo2058</i>	*-1.1	*1.3	7.1	similar to heme O oxygenase
<i>lmo2066</i>	*-1.5	*1.3	-4.2	unknown
<i>lmo2080</i>	*-1.3	-4.3	*1.1	unknown
<i>lmo2098</i>	*1.1	-2.2	-5.4	similar to PTS system galactitol-specific enzyme IIA component
<i>lmo2121</i>	*-100	*-1.1	-7.1	similar to maltosephosphorylase
<i>lmo2124</i>	*1.0	*1.4	-7.2	similar to maltodextrin ABC-transport system (permease)
<i>lmo2125</i>	*1.1	*4.0	-37.7	similar to maltose/maltodextrin ABC-transporter (binding protein)
<i>lmo2130</i>	*-1.3	2.2	4.1	similar to unknown protein
<i>lmo2135</i>	*1.2	*1.2	-4.1	similar to PTS system, fructose-specific enzyme IIC component
<i>lmo2137</i>	*1.2	*-1.7	-3.8	similar to PTS system, fructose-specific enzyme IIA component
<i>lmo2174</i>	*-1.3	*3.8	5.2	similar to unknown proteins
<i>lmo2212</i>	*-1.4	*-1.1	3.6	similar to uroporphyrinogen III decarboxylase
<i>lmo2232</i>	-1.4	*-1.1	3.5	similar to unknown proteins
<i>lmo2256</i>	*1.1	*-1.2	-4.0	similar to unknown proteins
<i>lmo2279</i>	*-100	*-2.4	-4.7	holin [Bacteriophage A118]
<i>lmo2280</i>	*1.1	*-1.1	-4.9	protein gp23 [Bacteriophage A118]
<i>lmo2281</i>	*1.4	*-2.1	-4.5	protein gp22 [Bacteriophage A118]
<i>lmo2282</i>	1.3	*-1.7	-5.9	protein gp21 [Bacteriophage A118]
<i>lmo2283</i>	*-5.0	*-1.1	-4.4	protein gp20 [Bacteriophage A118]
<i>lmo2284</i>	*1.8	*1.1	-5.1	Protein gp19 [Bacteriophage A118]
<i>lmo2285</i>	*1.0	*-24.5	-5.8	Protein gp18 [Bacteriophage A118]
<i>lmo2286</i>	*-1.5	*1.1	-3.8	Protein gp17 [Bacteriophage A118]
<i>lmo2288</i>	*2.2	*1.8	-3.6	Protein gp15 [Bacteriophage A118]
<i>lmo2290</i>	1.3	*-1.1	-4.4	Protein gp13 [Bacteriophage A118]
<i>lmo2291</i>	*1.3	*1.3	-4.3	major tail shaft protein [Bacteriophage A118]
<i>lmo2295</i>	1.4	*-1.5	-4.1	protein gp8 [Bacteriophage A118]
<i>lmo2297</i>	*1.2	*-1.7	-3.6	putative scaffolding protein [Bacteriophage A118]
<i>lmo2298</i>	*-2.1	*-2.1	-4.7	protein gp4 [Bacteriophage A118]
<i>lmo2299</i>	*1.1	*-1.5	-4.4	putative portal protein [Bacteriophage A118]
<i>lmo2300</i>	*-1.5	*-1.2	-7.5	putative terminase large subunit from Bacteriophage A118
<i>lmo2304</i>	-2.1	*1.5	-3.6	bacteriophage A118 gp65 protein
<i>lmo2314</i>	*-1.2	*3.1	-3.5	unknown
<i>lmo2324</i>	*-1.5	*1.4	-5.9	similar to anti-repressor [Bacteriophage A118]
<i>lmo2326</i>	*-1.3	*-1.0	-4.7	similar to protein gp41 [Bacteriophage A118]
<i>lmo2352</i>	*-2.5	*-1.7	5.5	similar to LysR family transcription regulator
<i>lmo2494</i>	-1.7	4.8	*1.4	similar to negative regulator of phosphate regulon
<i>lmo2585</i>	1.3	*-1.2	-3.7	similar to <i>B. subtilis</i> YrhD protein
<i>lmo2586</i>	1.5	*1.4	-3.7	similar to formate dehydrogenase alpha chain
<i>lmo2646</i>	*-1.0	4.3	-28.9	unknown
<i>lmo2647</i>	*-1.2	5.6	-17.1	similar to creatinine amidohydrolase
<i>lmo2648</i>	*1.0	*-1.3	-13.9	similar to phosphotriesterase

<i>lmo2650</i>	*1.4	*3.9	-11.7	similar to hypothetical PTS enzyme IIB component
<i>lmo2651</i>	*1.2	3.9	-10.2	similar to mannitol-specific PTS enzyme IIA component
<i>lmo2659</i>	*1.4	-5.7	-7.6	similar to ribulose-phosphate 3-epimerase
<i>lmo2660</i>	*1.3	-1.9	-7.1	similar to transketolase
<i>lmo2661</i>	1.5	*-1.4	-41.7	similar to ribulose-5-phosphate 3-epimerase
<i>lmo2662</i>	*1.1	*-2.9	-17.3	similar to ribose 5-phosphate epimerase
<i>lmo2663</i>	*1.0	*1.2	-33.9	similar to polyol dehydrogenase
<i>lmo2664</i>	*-1.0	*-1.5	-26.8	similar to sorbitol dehydrogenase
<i>lmo2665</i>	*-1.1	*1.3	-23.0	similar to PTS system galactitol-specific enzyme IIC component
<i>lmo2666</i>	*3.7	*-1.0	-20.5	similar to PTS system galactitol-specific enzyme IIB component
<i>lmo2667</i>	*1.5	2.8	-11.6	similar to PTS system galactitol-specific enzyme IIA component
<i>lmo2668</i>	*-1.3	-2.0	-13.2	similar to transcriptional antiterminator (BglG family)
<i>lmo2684</i>	3.2	47.2	*-1.3	similar to cellobiose phosphotransferase enzyme IIC component
<i>lmo2730</i>	*-1.2	-2.4	-3.6	similar to phosphatase
<i>lmo2731</i>	*1.1	-2.3	-4.2	similar to transcription regulator (RpiR family)
<i>lmo2742</i>	*-1.0	-1.2	-3.9	unknown
<i>lmo2752</i>	*-1.3	-4.1	-1.6	similar to ABC transporter, ATP-binding protein
<i>lmo2763</i>	*-1.0	-6.2	-3.9	similar to PTS cellobiose-specific enzyme IIC
<i>lmo2764</i>	*1.3	-6.0	*-3.0	similar to xylose operon regulatory protein and to glucose kinase
<i>lmo2773</i>	*-1.3	-3.4	-4.1	similar to transcription antiterminator
<i>lmo2818</i>	*1.2	*-1.3	-3.6	similar to transmembrane efflux protein
<i>lmo2848</i>	*1.4	-2.2	-3.9	highly similar to L-rhamnose isomerase

* P-value greater than 0.01; bold-type indicates expression change greater than 3.5-fold with a P-value less than 0.01. Gene names correspond to the gene names on the ListiList server <http://genolist.pasteur.fr/ListiList/>. The functions of the encoded proteins are indicated according to the EGD-e genome annotation where possible [1]. Rosetta Resolver software analysis sets the maximal fold-change possible as 100 [2]. Only genes which yielded an expression change greater than 3.5-fold with a P-value less than 0.01 in at least one of the growth conditions are listed in the table.

References

1. Glaser P, Frangeul L, Buchrieser C, Rusniok C, Amend A, et al. (2001) Comparative genomics of *Listeria* species. *Science* 294: 849-852.
2. Hughes TR, Marton MJ, Jones AR, Roberts CJ, Stoughton R, et al. (2000) Functional discovery via a compendium of expression profiles. *Cell* 102: 109-126.