

Table S1. List of oligonucleotides used in this study.

Name	Sequence 5'- 3'	Used for
DpqE	GTTCTGAGGTCATTACTGG	Sequencing pQE30 inserts
FpqE	CGGATAACAATTCACACAG	Sequencing pQE30 inserts
pMAD_5'	GCGAGAAGAACATAATGGG	Sequencing pMAD inserts
pMAD_3'	GTTACACATTAACTAGACAG	Sequencing pMAD inserts
Lmo_0500_EXT_5	GTGATGGATGGTGTTC	<i>lmo0500</i> verification
Lmo_0500_EXT_3	CTTGCAGTCCCCACTCGC	<i>lmo0500</i> verification
lmo_0500_F1-5_BamHI	GCAGGATCCTACTAGATATTCAATTAGC ^a	<i>lmo0500</i> construction
lmo_0500_F1-3_SalI	AGGAGATTGTTAGTCGACTAAATGCATTTCTCTCACC	<i>lmo0500</i> construction
lmo_0500_F2-5_SalI	AAAATGCATTTAGTCGACTAACAAATCTCCTCTCATGTTG	<i>lmo0500</i> construction
lmo_0500_F2-3_NcoI	TAACCATGGCGCTACTTTAAATCACG	<i>lmo0500</i> construction
Lmo0501 ext5	CATTCTTAAGCACCGAACCC	<i>lmo0501</i> verification
Lmo0501 ext3	CAAATATGGTAGTAATTC	<i>lmo0501</i> verification
Lmo0501 BamHI	TCTGGATCCCAGAAGTAAAATTTCA	<i>lmo0501</i> construction
Lmo0501 NcoI	CTTCCATGGTGCAGCGGATTCCATAAG	<i>lmo0501</i> construction
Lmo0503 ext5	CAAACATTAAATAAAATAAAC	<i>lmo0503</i> verification
Lmo0503 ext3	CCAGTCTACAAACTTG	<i>lmo0503</i> verification
Lmo0503 BamHI	TTAGGATCCTTAAAGAAGAGATGGTC	<i>lmo0503</i> construction
Lmo0503 NcoI	GTTCCATGGCGGAAAGAACATCTCCG	<i>lmo0503</i> construction
lmo0508-EXT-5	GCGAGCTTACTGTATGGGG	<i>lmo0508</i> verification
lmo0508-EXT-3	AGCTGCATGTAATCTACTG	<i>lmo0508</i> verification
lmo0508-F1-5-BamHI	GCAGGATCCCAGGAAAAGAGTGGCAAAC	<i>lmo0508</i> construction
lmo0508-F1-3-SalI	GAATACCTCCAGTCGACGAATAATATCCATTTGTGC	<i>lmo0508</i> construction
lmo0508-F2-5-SalI	GGATATTATTCGTCGACTGGAGGTATTCTATAATTGC	<i>lmo0508</i> construction
lmo0508-F2-3-NcoI	CGACCATGGGATTGCCATTAAATTGGCG	<i>lmo0508</i> construction
lmo_2660_EXT_5	CAATACAGAAATCCCTCTAGAC	<i>lmo2660</i> verification
lmo_2660_EXT_3	GCAACGAGGATATCTACGCCCGC	<i>lmo2660</i> verification
lmo_2660_F1-5_BamHI	CAGGATCCGGCCGGTGAACCCGGAATA	<i>lmo2660</i> construction
lmo_2660_F1-3_SalI	GAATGTCATACGTCGACTTCAAAACGGTCATCTCCC	<i>lmo2660</i> construction
lmo_2660_F2-5_SalI	CGTTTGAAAGTCGACGTATGACATTCTAGCGCCA	<i>lmo2660</i> construction
lmo_2660_F2-3_NcoI	AAACCATGGCGGCCAATTATCTAGAT	<i>lmo2660</i> construction
lmo_2665_EXT_5	AATGAACCTCACAGCCAGC	<i>lmo2665</i> verification
lmo_2665_EXT_3	GCATCGATACAGCAAGTGGC	<i>lmo2665</i> verification
lmo_2665_F1-5_BamHI	CTGGGATCCAAGATAAAGACAATGTAGC	<i>lmo2665</i> construction
lmo_2665_F1-3_SalI	GAAGTTACCACGTCGACACTCCTGACAGAAGTGTATC	<i>lmo2665</i> construction
lmo_2665_F2-5_SalI	TCTGTCAGGAGTGTGACGTGGTAACCTTTAACTGGG	<i>lmo2665</i> construction

<i>lmo_2665_F2-3_NcoI</i>	<i>CGACCATGGATCAAGGTCGCCGATAGAA</i>	<i>lmo2665</i> construction
<i>Lmo0499-5_BamHI</i>	<i>ACGGGATCCATGAAAATGATTGCG</i>	<i>Lmo0499</i> purification
<i>Lmo0499-3_SalI</i>	<i>TCCGTCGACTCACCTTCTTGGATA</i>	<i>Lmo0499</i> purification
<i>Lmo0505-5_BamHI</i>	<i>ACGGGATCCGTGGCAAAAATAGTT</i>	<i>Lmo0505</i> purification
<i>Lmo0505-3_SalI</i>	<i>TCCGTCGACTCATTCTGTTAAAAC</i>	<i>Lmo0505</i> purification
<i>ForPDIIBamHI</i>	<i>TTTTGGATCCATGAAAGCTTAAAATTATATGG</i>	<i>Lmo0506</i> purification
<i>RevPDIISalI</i>	<i>CTTTGTCGACTTAAAATCCCCTATCATT</i>	<i>Lmo0506</i> purification
<i>lmo2659_5_BamHI</i>	<i>CGGGATCCATGACATTCTGTAGCG</i>	<i>Lmo2659</i> purification
<i>lmo2659_3_SalI</i>	<i>CCGTCGACTTATTTTTAAGCC</i>	<i>Lmo2659</i> purification
<i>lmo2661_5_BamHI</i>	<i>CGGGATCCATGAGGAAGATAGC</i>	<i>Lmo2661</i> purification
<i>lmo2661_3_SalI</i>	<i>CCGTCGACTTACACATGTTTTC</i>	<i>Lmo2661</i> purification
<i>lmo2662_5_BamHI</i>	<i>TAGGATCCATGAAATTAAACAATTGG</i>	<i>Lmo2662</i> purification
<i>lmo2662_3_PstI</i>	<i>TCCTGCAGTCACTTCTTCGAG</i>	<i>Lmo2662</i> purification
<i>ForPDIBamHI</i>	<i>GACGGGATCCTTGAAAGCAGTAGTAAAAAC</i>	<i>Lmo2663</i> purification
<i>RevPDISalI</i>	<i>CAGCGTCGACTCCATTATTAAGATTCAC</i>	<i>Lmo2663</i> purification
<i>lmo2664_5_BamHI</i>	<i>GC GGATCCATGAGAGCAGCTGTG</i>	<i>Lmo2664</i> purification
<i>lmo2664_3_SalI</i>	<i>TGGTCGACTTAATCGTCACCTTCTG</i>	<i>Lmo2664</i> purification
<i>qPCR_0500_FOR</i>	<i>GGCACATGAAGCTGGTACTA</i>	<i>lmo0500</i> qRT-PCR
<i>qPCR_0500_REV</i>	<i>TGTTCGCTGCACTCATTCT</i>	<i>lmo0500</i> qRT-PCR
<i>Q0500_0501_FOR</i>	<i>CAGTAGAACATTCTGTGTC</i>	<i>lmo0500-0501</i> qRT-PCR
<i>Q0500_0501_REV</i>	<i>CAGATACATGCGTCTCCC</i>	<i>lmo0500-0501</i> qRT-PCR
<i>qPCR_0501_FOR</i>	<i>GCTTAATCGATACTGCTTTCATATTG</i>	<i>lmo0501</i> qRT-PCR
<i>qPCR_0501_REV</i>	<i>TCGAATAAGTCTAACGATGTGAGGA</i>	<i>lmo0501</i> qRT-PCR
<i>qPCR_0502_FOR</i>	<i>ACTGTTGAAAAATCGCCG</i>	<i>lmo0502</i> qRT-PCR
<i>qPCR_0502_REV</i>	<i>CACCGAGAGTTCCATGC</i>	<i>lmo0502</i> qRT-PCR
<i>qPCR_0508_FOR</i>	<i>CTTACCAACAAATTCAAACACCG</i>	<i>lmo0508</i> qRT-PCR
<i>qPCR_0508_REV</i>	<i>CACCACCAATAATTAGCCCCATA</i>	<i>lmo0508</i> qRT-PCR
<i>qPCR_2665_FOR</i>	<i>AGAACACAAACCTATGGTAGAAG</i>	<i>lmo2665</i> qRT-PCR
<i>qPCR_2665_REV</i>	<i>GAATAGTTCTGGGTCAACG</i>	<i>lmo2665</i> qRT-PCR
<i>actA-F</i>	<i>AGCAGATGAGTCTCACCCACA</i>	<i>actA</i> qRT-PCR
<i>actA-R</i>	<i>CCCTGCACTTTATCAACAAATC</i>	<i>actA</i> qRT-PCR

^aRestriction sites are in italic type.

Fig. S1. SDS/polyacrylamide gel electrophoresis with eight purified proteins encoded by the two D-arabitol-induced regions of *L. monocytogenes*. The indicated proteins were loaded on a 0.1% SDS/15% polyacrylamide gel and separated by electrophoresis. MW stands for molecular weight standards.

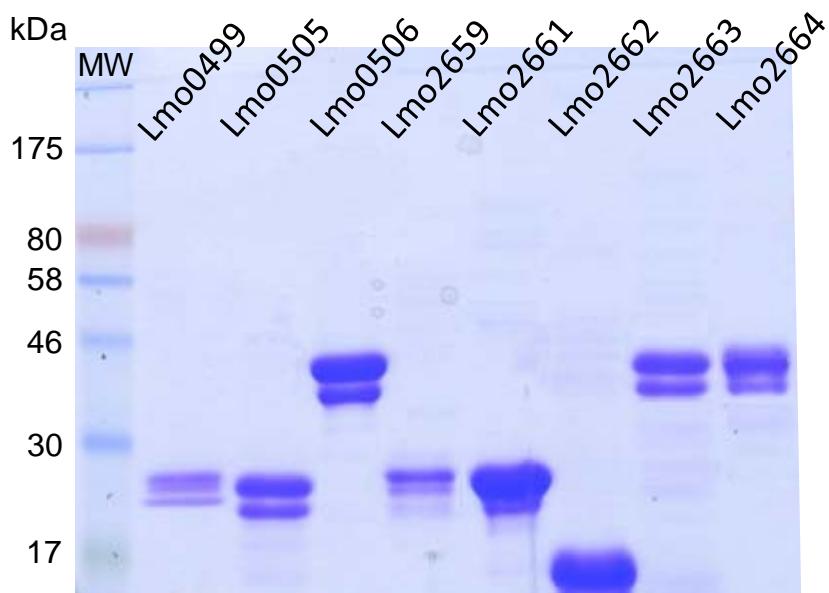


Fig. S2. Expression of a $\Phi(Phly-gus)$ reporter gene fusion of *L. monocytogenes* strain AML73 during growth on solid MM complemented with various carbon sources and containing X-GlcA. The formation of blue color indicates expression of the $\Phi(Phly-gus)$ fusion (β -D-glucuronidase activity). As previously reported, the expression of the $\Phi(Phly-gus)$ fusion in strain AML73 is strongly repressed by glucose, but derepressed during growth on glycerol. When grown in the presence of D-arabitol, only strain AML73, but not a *prfA* mutant derived from it exhibited β -D-glucuronidase activity; maximal activity was reached around 20 mM D-arabitol. However, virulence gene expression was reproducibly strongly repressed by 50 mM D-arabitol.

