

1 **Table S2. Proteins containing the CX₂CX₁₀CX₂C motif in various bacterial species.**

strains	Membrane protein	Cytoplasmic protein
<i>L. lactis</i> MG1363	LImg_0524 (2 TMD), LImg_0526 (1 TMD)	DnaJ (chaperone), RadA (DNA repair protein)
<i>L. lactis</i> IL1403		DnaJ, RadA
<i>S. thermophilus</i> LMD-9	STER_0131 (4 TMD)	DnaJ
<i>Lb. sakei</i> subsp <i>sakei</i> 23K	LSA1310 (5 TMD); LSA0043 (6TMD); LSA1494 (4 TMD)	DnaJ, RadA, LSA1423, LSA1707
<i>Lb plantarum</i> WCFS1	Lp_2948 (1 TMD), lp_2949 (1 TMD)	DnaJ, RadA, lp_3139, lp_3215, lp_1729
<i>B. subtilis</i> 168	YvbJ (1 TMD), YxkC (1 TMD)	DnaJ, RadA, YczA, YqxK
<i>E. coli</i> K-12	FdhE (1 TMD), PqiA (8 TMD), YciM (1 TMD)	DnaJ, RadA, YejH, YhgH
<i>Pathogens/opportunists</i>		
<i>E. faecalis</i> V583	EF_1523 (1 TMD), EF_1542 (1 TMD)	DnaJ, RadA
<i>L. mono.</i> e-GDE		DnaJ, RadA
<i>S. aureus</i> Mu50	TcaA , Sav0751	DnaJ, RadA
<i>S. agalactiae</i>		DnaJ, RadA
<i>S. pneumoniae</i> R6		DnaJ
<i>S pyogenes</i> M1 M 1		DnaJ, RadA, M5005 Spy_0176

- 2 The transmembrane domain (TMD) is defined by TMHMM software (1); in bold, proteins
 3 that are the most similar to LImg_0526 based on structural organization. RadA in *S.*
 4 *pneumoniae* and *S. thermophilus* contains only one cysteine. HMMTOP indicates no TMD in
 5 *E. coli* YciM but was demonstrated experimentally (2).

6 **REFERENCES**

- 7
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LImg_0524

MENQPTFC**PNC**GKEIEAGSVF**CTN**CGTKMENQPLANETSTANSVKPFVTEEQREILKNGATNLWE
WIVSAVKAPTKNVQENTPL**WFSWLSI**ILTAIFGALALGKILVNIITNASTSGNALGSANNSLGSLYN
QNVENTVANTANHVGQMIFPI**IISFI**ILHAATILGGWLANFAILGDKTFTFKMLNYYGRFMFFYLH

LImg_0526

MENNTKF**CPHC**GTEKKDAAF**CAN**CQSMТИNQPENKEAETKEKRPVNKKMIGIIGAVIAIFIIGGVF
AYINAQPKSILNAVKVNFGSYNSQGTVELLGDYQKKEIEIIGAKVGLPSSEVKKAEDSNIFSFFNSTTN
NSTKWQKFAKYFEDTRINISHSQNLSNGQKVTLKTTTLKDNPKEETKTYTVKNLKKATTYTIESVLKD
NPVSFTGFNHFGSVKFDDDKFTVNNDNSAPTDLTNGEQIIVRLSQDYINQQKSNGKILSGTATKTLV
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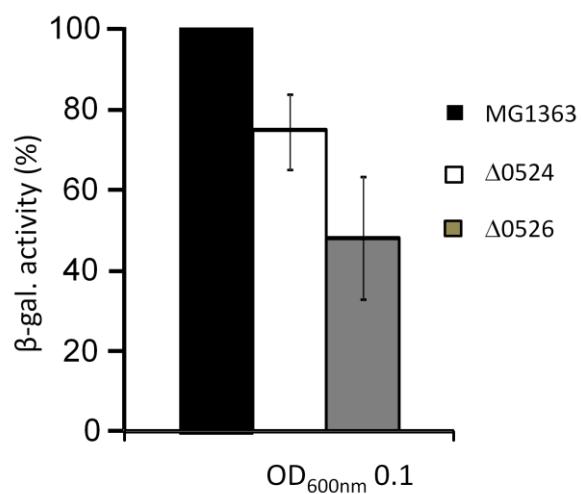
Fig. S1

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Fig. S2

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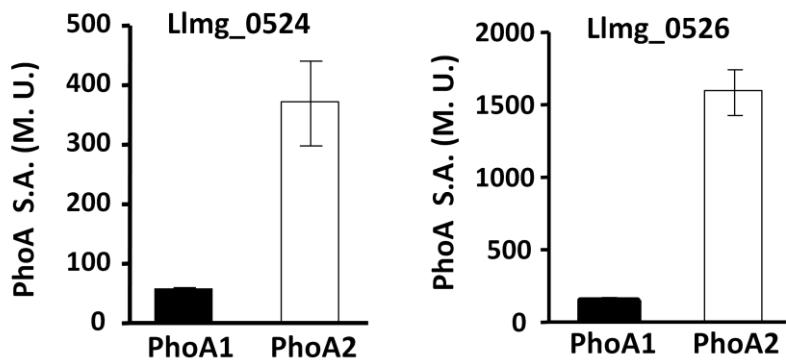


Fig. S3

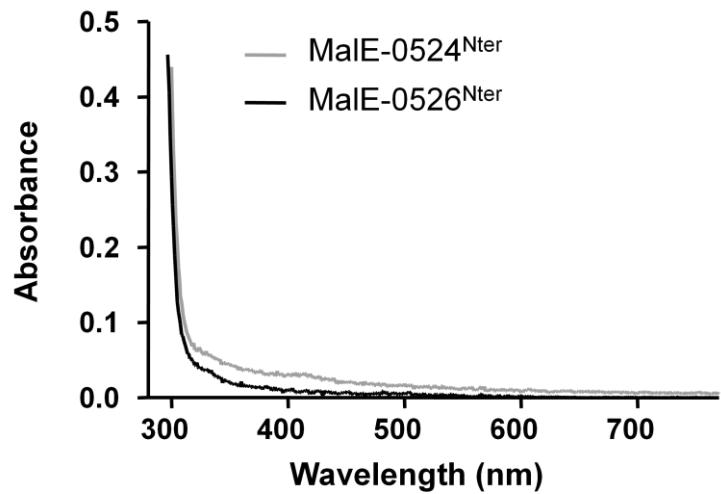
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Fig. S4

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