Table S1A. Bacterial strains used in this study.

Strain	Genotype	Reference
E. coli		
BL21 Star™ (DE3)	*F⁻ ompT hsdS$_B$(r$_{B-}$, m$_{B-}$) gal dcm rne131 (DE3)*	Invitrogen
S17-1	*Pro, res⁻ hsdR17 (rK⁻ mK⁺) recA⁻, RP4-2-Tc::Mu-Km::Tn7, Tp^r*	(1)
F. johnsoniae		
UW101		(2)
Fl_082	UW101 *ΔgldL*	(3)
Rhj_074	UW101 *gldL$_{64\text{-}74GSS}$*	This study
Rhj_076	UW101 *gldL$_{Δ64\text{-}74}$*	This study

Table S1B. Plasmids used in this study

Plasmid	Description	Reference
pT12_ SpaPQR3xFLAG	Encodes Salmonella enterica serovar Typhimurium SpaPQR operon with a C-terminal 3xFLAG tag on SpaR under the control of the E. coli rhaB promoter; ori cloDF13, Kan^r	(4)
pMA-RQ_SthPKLMN	Synthetic plasmid with *S. thermophila* strain DSM 21410 genes RCX05217-05221 and 100 bp upstream and downstream in the pMA-RQ vector. Ori Col E1, Amp^r	This study. Supplied by GeneArt (Invitrogen).
pRHJ012	pGEM-T *gldL*	(3)
pRHJ113	pMA-RQ_SthPKLMN with NcoI, NdeI and BamHI sites in GldL and GldM, respectively, removed by Quikchange mutagenesis	This study
pRHJ117	pT12 *S. thermophila gldL gldM(1-229)-twinstrep*	This study
pRHJ118	pT12 *P. gingivalis porL porM(1-227)-twinstrep*	This study
pRHJ170	pT12 *S. wenxiniae gldL gldM(1-224)-twinstrep*	This study
pRHJ174	pT12 *C. canimorsus gldL gldM(1-330)-twinstrep*	This study
pRHJ237	pGEM-T *gldL$_{64\text{-}74GSS}$*	This study
pRHJ238	pGEM-T *gldL$_{Δ64\text{-}74}$*	This study
pRHJ240	Suicide plasmid used to introduce the E64-L74 to GSSGSSGSSGS codon change into *gldL*; *gldL$_{64\text{-}74GSS}$* in pYT354	This study

pRHJ241	Suicide plasmid used to delete E64-L74 from *gldL*; $gldL_{\Delta 64\text{-}74}$ in pYT354	This study

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