**Table S1A. Bacterial strains used in this study.**

|  |  |  |
| --- | --- | --- |
| Strain | Genotype | Reference |
| *E. coli* |  |  |
| BL21 StarTM (DE3) | *F- ompT hsdSB(rB-, mB-) gal dcm rne131 (DE3)* | Invitrogen |
| S17-1 | *Pro, res- hsdR17 (rK- mK+) recA-, RP4-2-Tc::Mu-Km::Tn7, Tpr* | (1) |
| *F. johnsoniae* |  |  |
| UW101 |  | (2) |
| Fl\_082 | UW101 *ΔgldL* | (3) |
| Rhj\_074 | UW101 *gldL64-74GSS* | This study |
| Rhj\_076 | UW101 *gldLΔ64-74* | 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, Kanr | (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, Ampr | 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 *gldL64-74GSS* | This study |
| pRHJ238 | pGEM-T *gldLΔ64-74* | This study |
| pRHJ240 | Suicide plasmid used to introduce the E64-L74 to GSSGSSGSSGS codon change into *gldL*; *gldL64-74GSS* in pYT354 | This study |
| pRHJ241 | Suicide plasmid used to delete E64-L74 from *gldL*; *gldLΔ64-74* in pYT354 | This study |

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