

Table S3. Bacterial strains, phages, plasmids and primers used in this study.

Strains, phages, plasmids and primers	Characteristics and/or description	Reference /Source
<i>Enterococcus faecalis</i>		
OG1RF	Human oral isolate; Rf ^R , Fa ^R	(1)
<i>Δpip_{EF}</i>	OG1RF background with a deletion of OG1RF_10588 (PIP)	(2)
OG1RF_10820-Tn	<i>E. faecalis</i> OG1RF OG1RF_10820 (LytR family response regulator) transposon mutant (Genomic position: 860054). Rf ^R , Fa ^R , Cm ^R	(3)
cscK-Tn	<i>E. faecalis</i> OG1RF OG1RF_10951 (fructosekinase) transposon mutant (Genomic position: 993104). Rf ^R , Fa ^R , Cm ^R	(3)
OG1RF_12241-Tn	<i>E. faecalis</i> OG1RF OG1RF_12241 (LysR family transcriptional regulator) transposon mutant (Genomic position: 2363777). Rf ^R , Fa ^R , Cm ^R	(3)
OG1RF_11710-Tn	<i>E. faecalis</i> OG1RF OG1RF_11710 (O-antigen polymerase) transposon mutant (Genomic position: 1789261). Rf ^R , Fa ^R , Cm ^R	(3)
OG1RF_11714-Tn	<i>E. faecalis</i> OG1RF OG1RF_11714 (group 2 glycosyl transferase) transposon mutant (Genomic position: 1793746). Rf ^R , Fa ^R , Cm ^R	(3)
OG1RF_11715-Tn	<i>E. faecalis</i> OG1RF OG1RF_11715 (<i>epaOX</i> , glycosyltransferase) transposon mutant (Genomic position: 1794475). Rf ^R , Fa ^R , Cm ^R	(3)
<i>ΔepaOX</i>	JD102; <i>E. faecalis</i> OG1RF <i>ΔepaOX</i> (<i>ΔOG1RF_11715</i> , glycosyltransferase) markerless deletion. Rf ^R , Fa ^R	(4)
OG1RF_12434-Tn	<i>E. faecalis</i> OG1RF OG1RF_12434 (<i>mutL</i>) locus transposon mutant (Genomic position: 2567339), Rf ^R , Fa ^R , Cm ^R	(3)
OG1RF_12435-Tn	<i>E. faecalis</i> OG1RF OG1RF_12435 (<i>mutS</i>) locus transposon mutant (Genomic position: 2569574), Rf ^R , Fa ^R , Cm ^R	(3)
Wild type - E	OG1RF strain carrying pAT28 empty vector	This study

<i>Δpip_{EF}</i> - E	<i>Δpip_{EF}</i> strain carrying pAT28 empty vector	This study
OG1RF_10820-Tn - E	OG1RF_10820 transposon mutant carrying pAT28 empty vector. Rf ^R , Fa ^R , Cm ^R , Sp ^R	This study
<i>cscK</i> -Tn - E	OG1RF_10951 transposon mutant carrying pAT28 empty vector. Rf ^R , Fa ^R , Cm ^R , Sp ^R	This study
OG1RF_12241-Tn - E	OG1RF_12241 transposon mutant carrying pAT28 empty vector. Rf ^R , Fa ^R , Cm ^R , Sp ^R	This study
OG1RF_10820-Tn - C	OG1RF_10820 transposon mutant carrying pAT28 complementation vector. Rf ^R , Fa ^R , Cm ^R , Sp ^R	This study
<i>cscK</i> -Tn - C	OG1RF_10951 transposon mutant carrying pAT28 complementation vector. Rf ^R , Fa ^R , Cm ^R , Sp ^R	This study
OG1RF_12241-Tn - C	OG1RF_12241 transposon mutant carrying pAT28 complementation vector. Rf ^R , Fa ^R , Cm ^R , Sp ^R	This study
<i>mutL</i> -Tn - E	OG1RF_12434 (<i>mutL</i>) locus transposon mutant carrying pAT28 empty vector. Rf ^R , Fa ^R , Cm ^R , Sp ^R	This study
<i>mutS</i> -Tn - E	OG1RF_12435 (<i>mutS</i>) locus transposon mutant carrying pAT28 empty vector. Rf ^R , Fa ^R , Cm ^R , Sp ^R	This study
<i>mutL</i> -Tn - C	OG1RF_12434 (<i>mutL</i>) locus transposon mutant carrying pAT28 complementation vector. Rf ^R , Fa ^R , Cm ^R , Sp ^R	This study
<i>mutS</i> -Tn - C	OG1RF_12435 (<i>mutS</i>) locus transposon mutant carrying pAT28 complementation vector. Rf ^R , Fa ^R , Cm ^R , Sp ^R	This study
<i>mutL</i> -Tn-NPh_C1	<i>mutL</i> -Tn colony # 1 selected from O/N THB agar plate. Rf ^R , Fa ^R , Cm ^R	This study
<i>mutL</i> -Tn-NPh_C2	<i>mutL</i> -Tn colony # 2 selected from O/N THB agar plate. Rf ^R , Fa ^R , Cm ^R	This study
<i>mutL</i> -Tn-NPh_C3	<i>mutL</i> -Tn colony # 3 selected from O/N THB agar plate. Rf ^R , Fa ^R , Cm ^R	This study
<i>mutL</i> -Tn-NPh_C4	<i>mutL</i> -Tn colony # 4 selected from O/N THB agar plate. Rf ^R , Fa ^R , Cm ^R	This study
<i>mutL</i> -Tn-Ph_C1	<i>mutL</i> -Tn colony # 1 selected from O/N THB agar plate containing VPE25. Rf ^R , Fa ^R , Cm ^R	This study
<i>mutL</i> -Tn-Ph_C2	<i>mutL</i> -Tn colony # 2 selected from O/N THB agar plate containing VPE25. Rf ^R , Fa ^R , Cm ^R	This study

<i>mutL</i> -Tn-Ph_C3	<i>mutL</i> -Tn colony # 3 selected from O/N THB agar plate containing VPE25. Rf ^R , Fa ^R , Cm ^R	This study
<i>mutL</i> -Tn-Ph_C4	<i>mutL</i> -Tn colony # 4 selected from O/N THB agar plate containing VPE25. Rf ^R , Fa ^R , Cm ^R	This study
<i>mutS</i> -Tn-NPh_C1	<i>mutS</i> -Tn colony # 1 selected from O/N THB agar plate. Rf ^R , Fa ^R , Cm ^R	This study
<i>mutS</i> -Tn-NPh_C2	<i>mutS</i> -Tn colony # 2 selected from O/N THB agar plate. Rf ^R , Fa ^R , Cm ^R	This study
<i>mutS</i> -Tn-NPh_C3	<i>mutS</i> -Tn colony # 3 selected from O/N THB agar plate. Rf ^R , Fa ^R , Cm ^R	This study
<i>mutS</i> -Tn-NPh_C4	<i>mutS</i> -Tn colony # 4 selected from O/N THB agar plate. Rf ^R , Fa ^R , Cm ^R	This study
<i>mutS</i> -Tn-Ph_C1	<i>mutS</i> -Tn colony # 1 selected from O/N THB agar plate containing VPE25. Rf ^R , Fa ^R , Cm ^R	This study
<i>mutS</i> -Tn-Ph_C2	<i>mutS</i> -Tn colony # 2 selected from O/N THB agar plate containing VPE25. Rf ^R , Fa ^R , Cm ^R	This study
<i>mutS</i> -Tn-Ph_C3	<i>mutS</i> -Tn colony # 3 selected from O/N THB agar plate containing VPE25. Rf ^R , Fa ^R , Cm ^R	This study
<i>mutS</i> -Tn-Ph_C4	<i>mutS</i> -Tn colony # 4 selected from O/N THB agar plate containing VPE25. Rf ^R , Fa ^R , Cm ^R	This study

Escherichia coli

TG1	[<i>F'</i> <i>traD36 proAB lacIqZ ΔM15</i>] <i>supE thi-1 Δ(lac-proAB) Δ(mcrBhsdSM)5(rK - mK -)</i>	Lucigen
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Phage

VPE25	Siphoviridae; Wastewater isolate	(2)
NPV1	Siphoviridae; Wastewater isolate	(5)

Plasmids

pAT28	<i>Escherichia coli</i> and in Gram-positive bacteria shuttle vector; Sp ^R	(6)
pAT28: OG1RF_10820	pAT28 expressing OG1RF_10820 from the native promoter. Cloned into SacI/BamHI site. Sp ^R	This study
pAT28: <i>cscK</i>	pAT28 expressing <i>cscK</i> from the native promoter. Cloned into SacI/BamHI site. Sp ^R	This study

pAT28: OG1RF_12241	pAT28 expressing OG1RF_12241 from the native promoter. Cloned into SacI/BamHI site. Sp ^R	This study
pAT28: <i>mutL</i>	pAT28 expressing <i>mutL</i> from the native promoter. Cloned into SacI/XbaI site. Sp ^R	This study
pAT28: <i>mutS</i>	pAT28 expressing <i>mutS</i> from the native promoter. Cloned into SacI/EcoRI site. Sp ^R	This study

Primers

<i>lytR</i> -F	NNNNNNGAGCTCACAGTTATTTTTTTTGGTTGGTGTTA C; Forward primer to generate pAT28:OG1RF_10820; SacI site	This study
<i>lytR</i> -R	NNNNNNGGATCCGAATCTATGTTATAACTAACATCATT G; Reverse primer to generate pAT28:OG1RF_10820; BamHI site	This study
<i>cscK</i> -F	NNNNNNGAGCTCTCATTGTTAGATAACCGTGAATGCT C; Forward primer to generate pAT28: <i>cscK</i> ; SacI site	This study
<i>cscK</i> -R	NNNNNNGGATCCTCATTCTTAGCCATTTCTTCAAAT; Reverse primer to generate pAT28: <i>cscK</i> ; BamHI site	This study
<i>lysR</i> -F	NNNNNNGAGCTCTCGCCTCCTTTTGCTAAATTTATCG; Forward primer to generate pAT28:OG1RF_12241; SacI site	This study
<i>lysR</i> -R	NNNNNNGGATCCAGTATTCAACGACCTATTATTTCAG; Reverse primer to generate pAT28:OG1RF_12241; BamHI site	This study
<i>mutS</i> -F	NNNNNNGAGCTCCCTCCTAACCGGTTCCGGTTCCTAAT TAGA; Forward primer to generate pAT28: <i>mutS</i> ; SacI site	This study
<i>mutS</i> -R	NNNNNNGAATTCGAAGAAAAGTTAATCTCGGATCATT AAGAGG; Reverse primer to generate pAT28: <i>mutS</i> ; EcoRI site	This study
<i>mutL</i> -F	NNNNNNGAGCTCAATGATGACGCCTCGTTTCTTTTAA ATGGG; Forward primer to generate pAT28: <i>mutL</i> ; SacI site	This study
<i>mutL</i> -R	NNNNNNTCTAGAAGGAACCGAACCGGTTAGGAGGTC GTGAAATGG; Reverse primer to generate pAT28: <i>mutL</i> ; XbaI site	This study

RT- <i>fsrA</i> -F	GCAGGATTTGAGGTTGCTAAAG; qPCR forward primer for <i>fsrA</i>	This study
RT- <i>fsrA</i> -R	GAGCTGAAACCATATATTTGTAGGAAG; qPCR reverse primer for <i>fsrA</i>	This study
RT- <i>fsrBD</i> -F	TCTTCTGTGAGCTTACCGTTTATT; qPCR forward primer for <i>fsrBD</i>	This study
RT- <i>fsrBD</i> -R	CAGGTTCAATTGCTGTTCCCTTG; qPCR reverse primer for <i>fsrBD</i>	This study
RT- <i>fsrC</i> -F	TAACGAAGAGCTAGCGATGTTT; qPCR forward primer for <i>fsrC</i>	This study
RT- <i>fsrC</i> -R	GGTTGGTGCAATCGTTTCTTC; qPCR reverse primer for <i>fsrC</i>	This study
RT- <i>gelE</i> -F	CGCCATCACTAGCGACATTA; qPCR forward primer for <i>gelE</i>	This study
RT- <i>gelE</i> -R	GGCATCCCTCGATCATCAATAC; qPCR reverse primer for <i>gelE</i>	This study
RT- <i>sprE</i> -F	AGAAGACAAGAAGTGGCAGATAC; qPCR forward primer for <i>sprE</i>	This study
RT- <i>sprE</i> -R	CAACAACAAAGCCTGTTCCCTAAA; qPCR reverse primer for <i>sprE</i>	This study
RT-10296 -F	GCTTCACCAGGCTCCATTATAG; qPCR forward primer for OG1RF_10296	This study
RT-10296 -R	TGACTGCGGATACTGCAAAG; qPCR reverse primer for OG1RF_10296	This study
RT-10297 -F	TGTGTTGAGCCCGCTTATATC; qPCR forward primer for OG1RF_10297	This study
RT-10297 -R	TGGCTTCTTCTGTTCCATGAG; qPCR reverse primer for OG1RF_10297	This study
RT-10875 -F	GACTGTATTACGCTTCGCTAAAG; qPCR forward primer for OG1RF_10875	This study
RT-10875 -R	CCACATTGAACTGCCATAAA; qPCR reverse primer for OG1RF_10875	This study
RT-10876 -F	TGTGGGCTAAGCTAATGAATTT; qPCR forward primer for OG1RF_10876	This study

RT-10876 -R	AGTTCTCCTGAATCTATCCAAGTA; qPCR reverse primer for OG1RF_10876	This study
RT- <i>eutB</i> -F	CAATGGAAGCGCGTTGTTATG; qPCR forward primer for <i>eutB</i>	This study
RT- <i>eutB</i> -R	AGCGCGGATGACTTGTTT; qPCR reverse primer for <i>eutB</i>	This study
RT- <i>eutC</i> -F	CAGCTGCTATCGAAGCGAATA; qPCR forward primer for <i>eutC</i>	This study
RT- <i>eutC</i> -R	TTGCTGGCACACGACAATA; qPCR reverse primer for <i>eutC</i>	This study
RT- <i>eutH</i> -F	TAGCTGGCGCTTTCTGTTTAG; qPCR forward primer for <i>eutH</i>	This study
RT- <i>eutH</i> -R	AGCCGCTACTTCATTCATTCC; qPCR reverse primer for <i>eutH</i>	This study
RT- <i>epaA</i> -F	GCAGGAGGACTTGCAATCTA; qPCR forward primer for <i>epaA</i>	This study
RT- <i>epaA</i> -R	ACCATTCCACCAGCCAAA; qPCR reverse primer for <i>epaA</i>	This study
RT- <i>epaE</i> -F	AGGGATCAAACCGTCAGAAC; qPCR forward primer for <i>epaA</i>	This study
RT- <i>epaE</i> -R	GGCCCATTACCTCAACAGAA; qPCR reverse primer for <i>epaA</i>	This study
RT- <i>epaOX</i> -F	CCACGTTAACTCGTGCAGTA; qPCR forward primer for <i>epaOX</i>	This study
RT- <i>epaOX</i> -R	CCACTGTCATCAGAAGAACCA; qPCR reverse primer for <i>epaOX</i>	This study
RT- 11714 -F	GGAAGCATTACCGCTTCTAAGT; qPCR forward primer for OG1RF_11714	This study
RT- 11714 -R	ATGCAAGGTCGCTATATTCTGG; qPCR reverse primer for OG1RF_11714	This study
RT- 11710 -F	GTGTATGGTTTGTCTTAGCGTTAG; qPCR forward primer for OG1RF_11710	This study
RT- 11710 -R	TCGGCCTTCATAGAAACCTATAC; qPCR reverse primer for OG1RF_11710	This study

RT- 11100 -F	AAGGGCAAGCATTTC AAGCG; qPCR forward primer for OG1RF_11100	This study
RT- 11100 -R	TCTTGACGGTCACGTTCTGC; qPCR reverse primer for OG1RF_11100	This study
RT- 11101 -F	CCAATGGCTTGGCAACTGAC; qPCR forward primer for OG1RF_11101	This study
RT- 11101 -R	GCGAACGAACGTGCATTTTG; qPCR reverse primer for OG1RF_11101	This study
RT- 11104 -F	GGGAATGGCACCCCTGAAAGA; qPCR forward primer for OG1RF_11104	This study
RT- 11104 -R	CTTCGCGCTTGGCTTTTTGA; qPCR reverse primer for OG1RF_11104	This study
RT- 11105 -F	TTGGAAAGGTGGCGGAATAG; qPCR forward primer for OG1RF_11105	This study
RT- 11105 -R	TCTGCTTTGATACTGGCTAAGG; qPCR reverse primer for OG1RF_11105	This study
RT- 11109 -F	GCTTTGGAGAACGCTGAACG; qPCR forward primer for OG1RF_11109	This study
RT- 11109 -R	TTTTGACAGTCTTGGCGCTCG; qPCR reverse primer for OG1RF_11109	This study
RT- 11115 -F	CTCAACCGGATCGTGCTTATT; qPCR forward primer for OG1RF_11115	This study
RT- 11115 -R	CCTTGGTAGCGAATGGATCATAG; qPCR reverse primer for OG1RF_11115	This study
RT-16S -F	CGCTTCTTTCCTCCCGAGT; qPCR forward primer 16S rRNA gene	This study
RT-16S -F	GCCATGCGGCATAAACTG; qPCR reverse primer 16S rRNA gene	This study

Cm^R - chloramphenicol resistant; Rf^R - rifampicin resistance; Fa^R - fusidic acid resistance; SpR - spectinomycin resistance; Restriction enzyme sites are underlined

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