

Supplementary Table S2: Prototype RCR and MOB_{V1} plasmids (ordered by host)

Plasmid/ICE name ^a	GenBank Acc. No.	Relaxase GenBank Acc. No. ^b	Replication initiation protein GenBank Acc. No.	Host	Order
pMV158	NC_010096.1	YP_001586274	YP_001586272.1	<i>Streptococcus agalactiae</i>	Lactobacillales
pGB2001	NC_015973.1	YP_004831119.1	YP_004831118.1	<i>Streptococcus agalactiae</i>	
pGB2002	NC_015971.1	YP_004831084.1	YP_004831083.1	<i>Streptococcus agalactiae</i>	
pSBO2	AB021465.1	BAA75017.1	BAA75016.1	<i>Streptococcus bovis</i>	
p5580	NC_019370.1	YP_006965545.1	YP_006965544.1	<i>Streptococcus dysgalactiae</i>	
ICESgal1	FN597254.1	CBI14176.1	CBI14175.1	<i>Streptococcus gallolyticus</i>	
pGA2000	NC_019252.1	YP_006961085.1	YP_006961084.1	<i>Streptococcus pyogenes</i>	
pRW35	NC_010423.2	YP_001716200.1	YP_001716199.1	<i>Streptococcus pyogenes</i>	
pSsal-M18	AGBV01000006.1		EGX29383.1	<i>Streptococcus salivarius</i>	
pSSU1	NC_002140.1	NP_053061.1	NP_053058.1	<i>Streptococcus suis</i>	
pER13	NC_002776.1	NP_115336.1	NP_115335.1	<i>Streptococcus thermophilus</i>	
pSMQ172	NC_004958.1	NP_862547.1	NP_862546.1	<i>Streptococcus thermophilus</i>	
pGL2	NC_016981.1	YP_005352352.1	YP_005352348.1	<i>Lactococcus garvieae</i>	
pBM02	NC_004930.1	NP_862027.1	NP_862030.1	<i>Lactococcus lactis</i>	
pWV01	NC_002192.1		NP_053450.1	<i>Lactococcus lactis</i>	
pLA106	NC_004985.1	NP_862697.1	NP_862699.1	<i>Lactobacillus acidophilus</i>	
pCD034-2	NC_016034.1	YP_004869655.1	YP_004869654.1	<i>Lactobacillus buchneri</i>	
pSMA23	NC_010242.1	YP_001649176.1	YP_001649177.1	<i>Lactobacillus casei</i>	
pRCEID2.9	NC_017466.1	YP_005849229.1	YP_005849231.1	<i>Lactobacillus casei</i>	
pTXW	NC_013952.1	YP_003517730.1	YP_003517728.1	<i>Lactobacillus paracasei</i>	
pWCZ	NC_019669.1	YP_007027014.1	YP_007027013.1	<i>Lactobacillus paracasei</i>	
pLB4	M33531.1	AAA25252.1	AAA25254.1	<i>Lactobacillus plantarum</i>	
pMRI_5.2	NC_019900.1	YP_007215174.1, YP_007215171.1	YP_007215171.1	<i>Lactobacillus plantarum</i>	
pPB1	NC_006399.1	YP_138221.1	YP_138219.1	<i>Lactobacillus plantarum</i>	
pLFE1	NC_012628.1	YP_002842050.1	YP_002842049.1	<i>Lactobacillus plantarum</i>	
pYSI8	NC_010936.1	YP_001967741.1	YP_001967739.1	<i>Lactobacillus sakei</i>	
pLS55	NC_010375.1	YP_001691307.1	YP_001691308.1	<i>Lactobacillus sakei</i>	
LkipL48	NC_014135.1	YP_003620509.1	YP_003620511.1	<i>Leuconostoc kimchii</i>	
pMBLR00	NC_019353.1	YP_006964795.1	YP_006964794.1	<i>Leuconostoc mesenteroides</i>	
pE33L5	NC_007104.1	YP_245942.1	YP_245944.1	<i>Bacillus cereus</i>	Bacillales
p1414	NC_002075.1	NP_049443.1	NP_049435.1	<i>Bacillus subtilis</i>	
pGI1	NC_004335.1	NP_705753.1	NP_705751.1	<i>Bacillus thuringiensis</i>	
pMA67	NC_010875.1	YP_001966010.1	YP_001966008.1	<i>Paenibacillus larvae</i>	
pT181	NC_001393.1	NP_040472.1	NP_040469.1	<i>Staphylococcus aureus</i>	
pUB110	NC_001384.1	NP_040431.1	NP_040434.1	<i>Staphylococcus aureus</i>	
pCPS49	NC_019142.1	YP_006958108.1	YP_006958109.1	<i>Staphylococcus aureus</i>	
pE194	NC_005908.1	YP_025317.1	AAA25603.1	<i>Staphylococcus aureus</i>	
SAP085B	NC_013345.1	YP_006938616.1	YP_006938614.1	<i>Staphylococcus aureus</i>	
pC194	NC_002013.1		NP_040435.3	<i>Staphylococcus aureus</i>	
pC221	NC_006977.1	YP_232728.1 (MOB _{p77})	YP_232726.1	<i>Staphylococcus aureus</i>	

^a: Prototype plasmids used in Figure 6 are listed.

^b: Unless otherwise indicated, all relaxases belong to MOB_{V1} subfamily.