

Table S6. The *mariner*-erythromycin magic pool

Plasmids used for making the mariner-Erm magic pool		
Part plasmid	Description	part ID
one part1 plasmid		
pHLL213	part1 for mariner transposon vector	
mix of 10 part2 plasmids		
pHLL216	part2 (kanR promoter from pKMW3)	p2.1
pHLL217	part2 (CatR promoter from pDONR221)	p2.2
pHLL218	part2 (ErmR promoter from pMarA)	p2.3
pHLL219	part2 (AmpR promoter from pMarA)	p2.4
pJW9	part2 (tetA promoter from pKMW4)	p2.5
pJW64	part2 (apFAB68 promoter)	p2.6
pJW66	part2 (dnaE promoter from <i>Bacteroides thetaiotaomicron</i>)	p2.7
pJW78	part2 (Lig promoter from <i>Bacteroides thetaiotaomicron</i>)	p2.8
pJW82	part2 (Glycosyltransferase promoter from <i>Echinicola vietnamensis</i> KMM 6221, DSM 17526)	p2.9
pJW85	part2 (Glycosyltransferase promoter from <i>Pontibacter actiniarum</i>)	p2.10
mix of 5 part3 plasmids		
pJW21	part3 (ErmR gene from pExchange)	p3.1
pYS12	part3 (ErmR erythromycin resistance gene from pLOR_empty)	p3.2
pYS14	part3 (ErmBP erythromycin resistance gene from pHLL24)	p3.3
pYS13	part3 (ErmR erythromycin resistance gene from pMob-efgpErmCat-aspSac-pigEKO)	p3.4
pYS16	part3 (ErmR erythromycin resistance gene from pMarA)	p3.5
one part4 plasmid		
pHLL215_NN2	barcoded part4 for mariner transposon vector	
mix of 24 part5 plasmids		
pHLL229	part5_mariner (glycerol-3-phosphate acyltransferase)	mar_p5.1

	promoter from <i>Delftia</i> sp. GW456-R20)	
pHLL233	part5_mariner (GFF3808;OUC52699 promoter from <i>Sphingobium</i> sp. GW456-12-10-14-TSB1)	mar_p5.2
pHLL244	part5_mariner (AL1_24670 promoter from <i>Alistipes shahii</i>)	mar_p5.3
pHLL245	part5_mariner (selA promoter from <i>Jonquetella anthropi</i> ADV 126, DSM 22815)	mar_p5.4
pHLL246	part5_mariner (ftsY promoter from <i>Myroides odoratus</i> DSM 2801)	mar_p5.5
pHLL247	part5_mariner (folC promoter from <i>Prevotella copri</i> DSM 18205)	mar_p5.6
pHLL248	part5_mariner (ftsY promoter from <i>Prevotella ruminicola</i> 23)	mar_p5.7
pJW14	part5_mariner (transposase promoter from pHIMAR)	mar_p5.8
pJW28	part5_mariner (cspB promoter from <i>Corynebacterium glutamicum</i>)	mar_p5.9
pJW30	part5_mariner (DnaE promoter from <i>Collinsella stercoris</i>)	mar_p5.10
pJW31	part5_mariner (DnaB promoter from <i>Rhodospirillum rubrum</i>)	mar_p5.11
pJW35	part5_mariner (FolC promoter from <i>Parabacteroides distasonis</i>)	mar_p5.12
pJW36	part5_mariner (KdsB promoter from <i>Leptotrichia goodfellowii</i>)	mar_p5.13
pJW41	part5_mariner (FolA promoter from <i>Arthrobacter chlorophenolicus</i>)	mar_p5.14
pJW42	part5_mariner (DapF promoter from <i>Leptospira interrogans</i>)	mar_p5.15
pJW43	part5_mariner (BT1311 promoter from <i>Bacteroides thetaiotaomicron</i>)	mar_p5.16
pJW48	part5_mariner (Lgt promoter from <i>Gillisia limnaea</i>)	mar_p5.17
pJW51	part5_mariner (Dxs promoter from <i>Belliella baltica</i>)	mar_p5.18
pJW70	part5_mariner (MviN/MurJ promoter from <i>Ralstonia</i> sp. UNC404CL21Col IMG taxon ID 2558309150)	mar_p5.19

pJW74	part5_mariner (Lauroyl/myristoyl acyltransferase promoter from <i>Ralstonia</i> sp. UNC404CL21Col IMG taxon ID 2558309150)	mar_p5.20
pJW79	part5_mariner (dTDP-4-amino-4,6-dideoxygalactose transaminase promoter from <i>Echinicola vietnamensis</i> KMM 6221, DSM 17526)	mar_p5.21
pJW81	part5_mariner (Glycosyltransferase promoter from <i>Echinicola vietnamensis</i> KMM 6221, DSM 17526)	mar_p5.22
pJW84	part5_mariner (Glycosyltransferase promoter from <i>Pontibacter actiniarum</i>)	mar_p5.23
pJW86	part5_mariner (<i>rfaG</i> promoter from <i>Pontibacter actiniarum</i>)	mar_p5.24