

Table S3: Summary of mating experiments. Transfer frequencies (of ICE or IME) are indicated as transconjugant per donor cell. The detection level for *ICEst3* and its mutants and *IME_SsalL25_oriT* and its mutants are 10^{-6} and 10^{-7} respectively so when the frequency was below this detection level, ND ("not detected") is indicated. If the donor strain does not carry the *IME_SsalL25_oriT* or if ICE transconjugants cannot be identified due to the presence of a resident ICE in the recipient strain, it has been indicated in the table as "-". Mating pairs not tested were left empty.

Donor strains	Recipient strains			
	LMG18311 $\Delta epsE$		LMG18311 $\Delta epsE$ (<i>ICEst3</i> Δint)	
	ICE	IME	ICE	IME
LMG18311(<i>ICEst3</i>)	2.3×10^{-4} $\pm 0.8 \times 10^{-4}$ *	-		
LMG18311(<i>ICEst3::IME_SsalL25_oriT</i>)	3.3×10^{-4} $\pm 1.3 \times 10^{-4}$ *	3.1×10^{-6} $\pm 1.5 \times 10^{-6}$ *	-	9.3×10^{-6} $\pm 6.5 \times 10^{-6}$ *
LMG18311(<i>ICEst3</i> Δint)	ND	-		
LMG18311(<i>ICEst3</i> $\Delta int::IME_SsalL25_oriT$)	ND	ND	-	4.8×10^{-6} $\pm 4.0 \times 10^{-6}$ *
LMG18311(<i>ICEst3</i> Δrel)	ND	-		
LMG18311(<i>ICEst3</i> $\Delta rel::IME_SsalL25_oriT$)	ND	ND		
LMG18311(<i>ICEst3::IME_SsalL25_oriT</i> Δrel)	3.5×10^{-4} $\pm 2.0 \times 10^{-4}$ *	ND	-	ND

* transconjugants per donor cell