

A

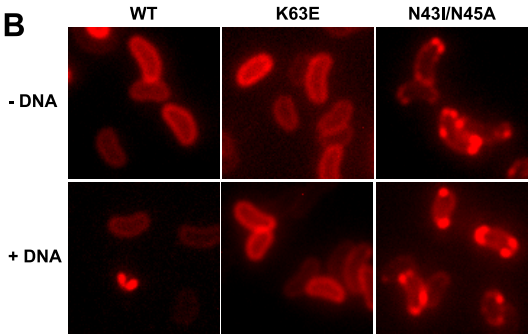
↓ feature	→ strain*	ComEA (WT)	ss[ComEA]	ComEA (N45A)	ComEA (N43I/N45A)	ComEA (S48A)	ComEA (S48T)	ComEA (E50A)	ComEA (E50R)	ComEA (E51A)
periplasmic localization		+	+	+	+	+	+	+	+	+
uniformly distributed		+	+	+	- #	+	+	+	+	+
foci formation + DNA		+	-	+	- #	+	+	+	+	+

↓ feature	→ strain*	ComEA (E51K)	ComEA (K57A)	ComEA (D69A)	ComEA (D69K)	ComEA (R71A)	ComEA (R71A/E72A)	ComEA (R71D)	ComEA (R71D/D81R)	ComEA (R71D/D82R)
periplasmic localization		+	+	+	+	+	+	+	+	+
uniformly distributed		+	+	+	+	+	+	+	+	+
foci formation + DNA		+	+	+	+	+ (red.)	+ (red.)	-	-	-

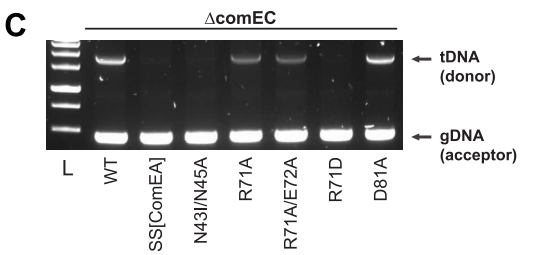
↓ feature	→ strain*	ComEA (E72R)	ComEA (H79A)	ComEA (T78A/H79A)	ComEA (D81A)	ComEA (D81R)	ComEA (D82K)	ComEA (K87A)	ComEA (E91A)	ComEA (E91R)
periplasmic localization		+	+	+	+	+	+	+	+	+
uniformly distributed		+	+	+	+	+	+	+	+	+
foci formation + DNA		+	+	+	+	+	+	+	+	+

* all translationally fused to mCherry;
ComEA variant showed aggregation in the absence of tDNA; aggregation did not increase upon addition of DNA;
red., reduced ComEA foci observed;

B



C



D

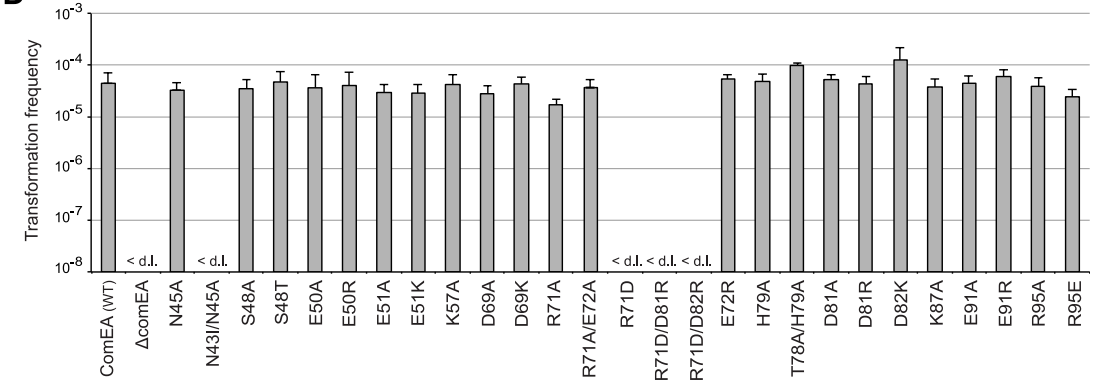


Fig. S7