

Table S1 Primers used in this study

Primers	Primer Description	Sequence (5' →3')
D1	<i>sadA</i> forward primer used for gene disruption	TCGGTCTTAGCAGCATTATGGTTTCTGCGGA TGCACTGGCGTGTAGGCTGGAGCTGCTTC
D2	<i>sadA</i> reverse primer used for gene disruption	GTCGTATTGGCGGCGATATCGGTTGTGTTCT GGTTA ATGCGGGAATTAGCCATGGTCCAT
D3	Upstream Check Primer	AGTCCTCTGGAATGCCGCTA
D4	Downstream Check Primer	TTGTGCTTAGCGCTGAATGC
D5	Forward primer used for cloning <i>sadA</i> into pET22b and pQE60	GGAAATTACTACTCACATATGAATAGAATAT TTAAAGTC
D6	Reverse primer used for cloning <i>sadA</i> into pET22b	AGAGTTAATTTAGAATTCTGTGAGTAGGCTG TGG
D7	Reverse primer used for cloning <i>sadA</i> into pQE60	GCTACTAAGCTTTTACCACTGGAAGCCCGC