

**Additional file 2:** Primers used in this study

Primer	Sequence
Cloning of <i>bcsZ</i> into pBAD30	
BcsZclon_N	ACAGCGCTCAAGGAGGGTAACATATGATGACTATGCTGCGCGGA TGG
BcsZclon_C	CAGACGCATGCTTAATGGTGGTGATGATGGTGATGGTGACGTGA ACTTACGCATTCTGGCCCCGTCAG
Site-directed mutagenesis BcsZ <sub>E56A</sub>	
BcsZNE56A	CAGGGACGCGTTATCGATCCGGGCGATGCGCGAAAAATTACCAC CTCCGCAGGG
BcsZCE56A	CTGTCGCTGCACGGCCTGGGCGTCGCGATTTTGCAGGAAAGGCAG TAAGGC
<i>bcsZ</i> flanking primers	
BcsZup	TGCTGGCGGTACTGGCGGCCCTCAGTGTGG
BcsZdown	GTCGCTGCGCCGGCAAGCGGTGTTAGCG
Construction of $\Delta bcsZ::tetRA$	
BcsZ-TetRA	CAGGGACGCGTTATCGATCCGGGCGATGCGCAAAAATTACCACC TCCTTAAGACCCACTTTCACATTTAAG
BcsZC-TetRA	CTGTCGCTGCACGGCCTGGGCGCGATTTTGCAGGAAAGGCAGTA

	ACTAAGCACTTGTCTCCTGTTTACTC
Construction of $\Delta bcsZ::Cm$	
BcsZ-CmDel- Start	ATGACTATGCTGCGCGGATGGATAACGATGCTCGTCATGCGTGTA GGCTGGAGCTGCTTC
BcsZ-CmDel- Stop	TTAACGTGAACTTACGCATTCCTGGCCCCAGTCAGGTAATCATAT GAATATCCTCCTTAG
Control primers $\Delta bcsZ::Cm$	
Cm inside	CTCCAGAGCGATGAAAACGT
BcsZcontrol Rev	CGGCAAAAAGCGTGCATGAGAC
Control primers <i>bcsC</i> ::MudJ	
bcsC_200upstr eam	CCGGTCGGGTTTTCCGCCGCTTACTGCCT
mudJ- 5primerc	TTATCGTGAAACGCTTTCGCGTTTTTCGTG
Construction of <i>bcsC</i> -3XFLAG	
BcsC3XFLAG forw	GATTTACCGCCGCAGCCTCTGGTGCCTTACGCTGACTGGgactacaaag accatgacgg
BcsC3XFLAG Rev	GCCTACGACGCCTGTCAATTCGTAGGCCTGACGCAATGAaatatgaatat cctccttag

Control primers <i>bcsC</i> -3XFLAG	
bcsCintfw	CAGCGTACGGAAAACGGTC
Km inside rv	GTTTCGCTTGGTGGTCGAAT