The *E. coli* toxin MqsR destabilizes the transcriptional repression complex formed between the antitoxin MqsA and the *mqsRA* operon promoter

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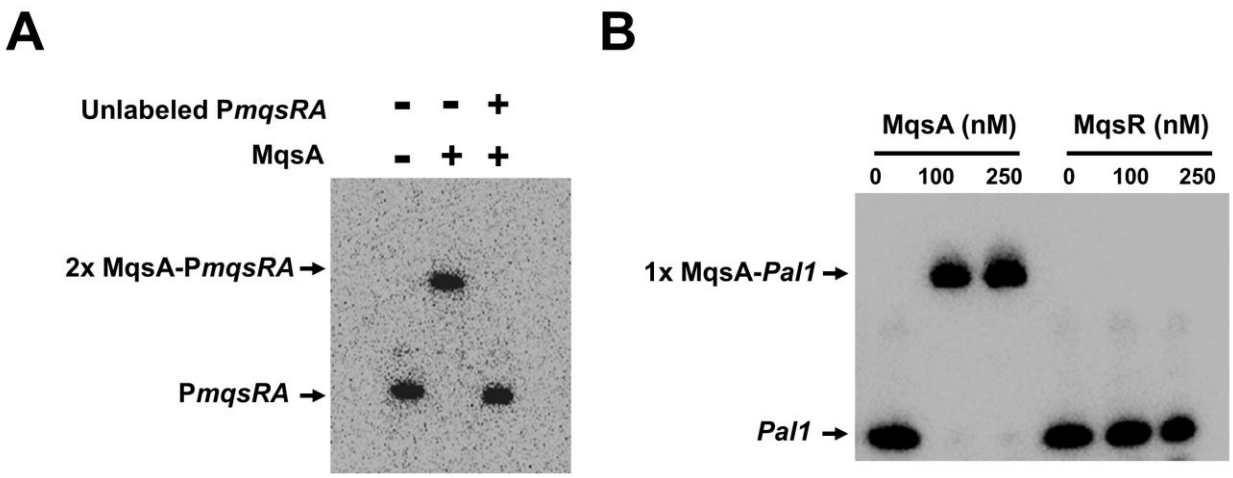
TABLE S1. PCR primers used to generate templates for T7 RNA polymerase *in vitro* transcription. *F* indicates forward primer and *R* indicates reverse primer. The T7 promoter sequence is underlined and the bases incorporated into mRNA during transcription are in bold.

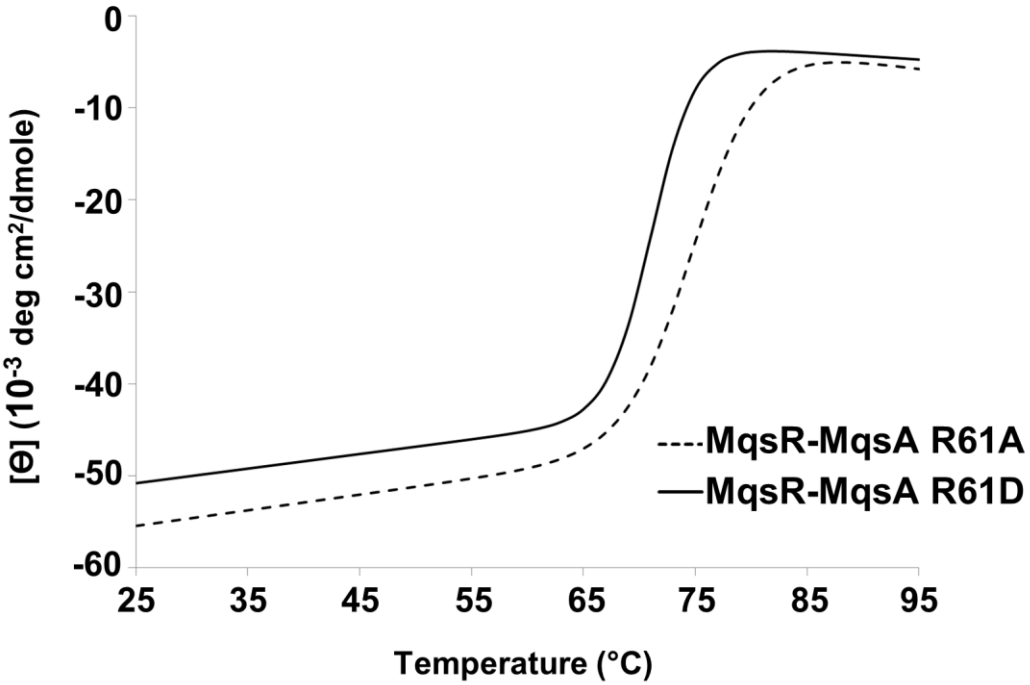
RNA	Transcript size (nt)	Primer Name	Sequence (5' - 3')
mqsA	415	PT7-*mqsRA-F*	TAATACGACTCACTATA**GGGAGAAGGAGATATACAT**
		PT7-*mqsA-R*	TTAACGGATTTCATTCAATAGTTCTGG
mqsR	315	PT7-*mqsRA-F*	TAATACGACTCACTATA**GGGAGAAGGAGATATACAT**
		PT7-*mqsR-R*	TTACTTCTCCTTAAACGAGACGAT

TABLE S2. PCR primers used to generate DNA for EMSA experiments. *F* indicates forward primer and *R* indicates reverse primer.

DNA	Transcript size (nt)	Primer Name	Sequence (5' - 3')
P*mqsRA*	234	P*mqsRA-F*	GTGATGCCTGACTCCAGCTT
		P*mqsRA-R*	CGTGTATGTGGTGTGCGTTT
Pal1	26	Pal1-*F*	TCTAACTAACCTTTTAGGTGCTTTTT
		Pal1-*R*	AAAAAGCACCTAAAAGGTTAGTTAGA
Pal2	26	Pal2-*F*	TGTAATTAACCTTTTAGGTTATAACT
		Pal2-*R*	AGTTATAACCTAAAAGGTTAATTACA



Supplemental Figure S1. MqsA binds P*mqsRA* specifically. (A) EMSA in the presence and absence of unlabeled P*mqsRA* DNA. In lane 2, MqsA was incubated with 100 fmol of biotin-labeled P*mqsRA* DNA. Lane 3 is the same as lane 2 except MqsA was incubated first with a 2-fold excess of unlabeled P*mqsRA* DNA. (B) EMSA with increasing amounts of MqsA (lanes 2-3) or MqsR (5-6) incubated with 100 fmol biotin-labeled Palindrome 1 (Pal1).



Supplemental Figure S2. Thermal denaturation at 208 nm of the MqsR-MqsA R61 mutants. The T_m for MqsR-MqsA R61A (5 μM, dashed line) and MqsR-MqsA R61D (5 μM, solid line) are 75.2 ± 0.4°C and 70.5 ± 1.0°, respectively.