Electronic Supplementary Material (ESI) for Analyst.

Supporting Information

Demonstration of a quantitative triplex LAMP assay with an improved probe-based readout for the detection of MRSA

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Experimental Information

1. Experimental Results.

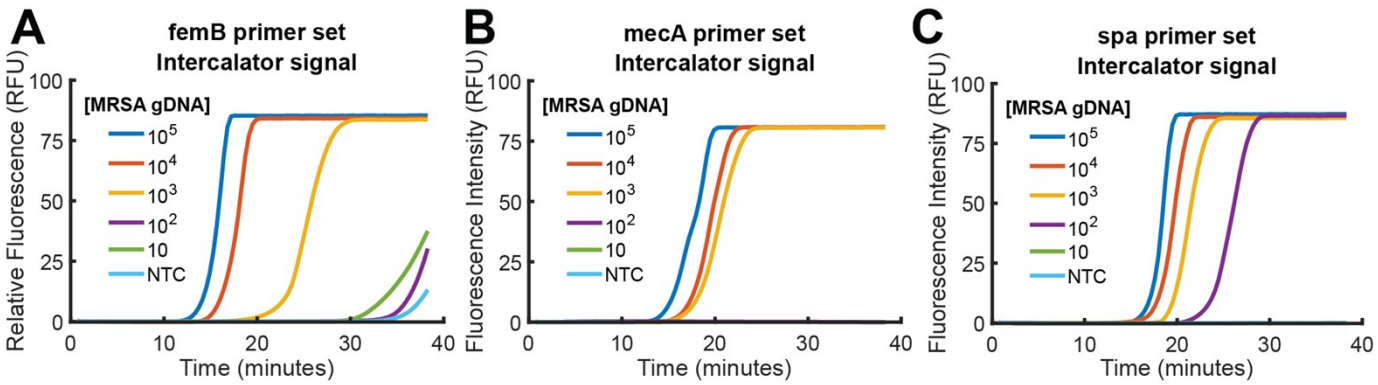

Figure S1. Genome dilutions with 1 µM SYTO 82 (intercalator) to assess limits of detection across all three primer sets. (A) femB shows high discrimination between concentrations of 10^3 copies and higher, and 100 copies and lower. (B) mecA show amplification of 10^3 copies and higher, with no amplification at lower concentrations. (C) spa shows amplification at 100 copies and higher.

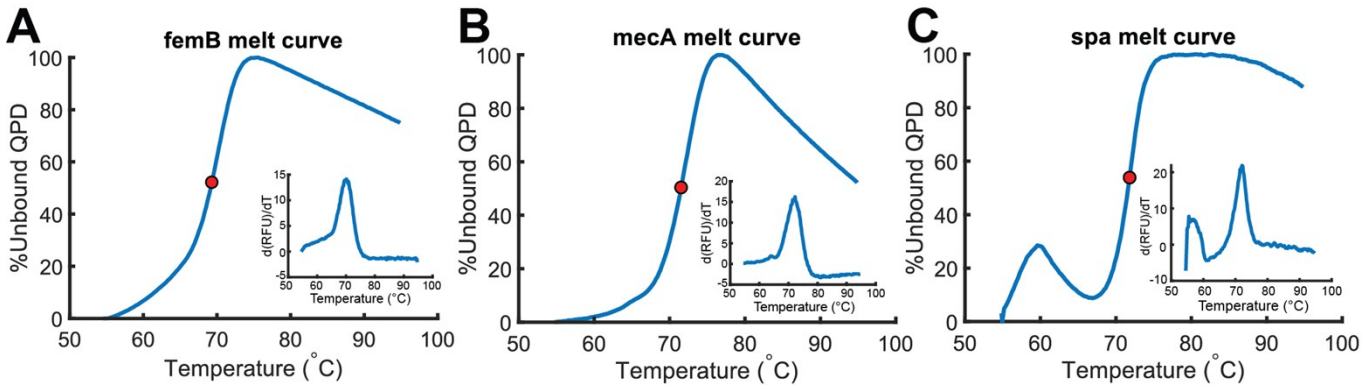

Figure S2. Melt curves for QPDs across all primer sets. (A) femB melts show a melt temperature of roughly 70^0C, whereas mecA (B) and spa (C) have melts of roughly 71-72^0C.

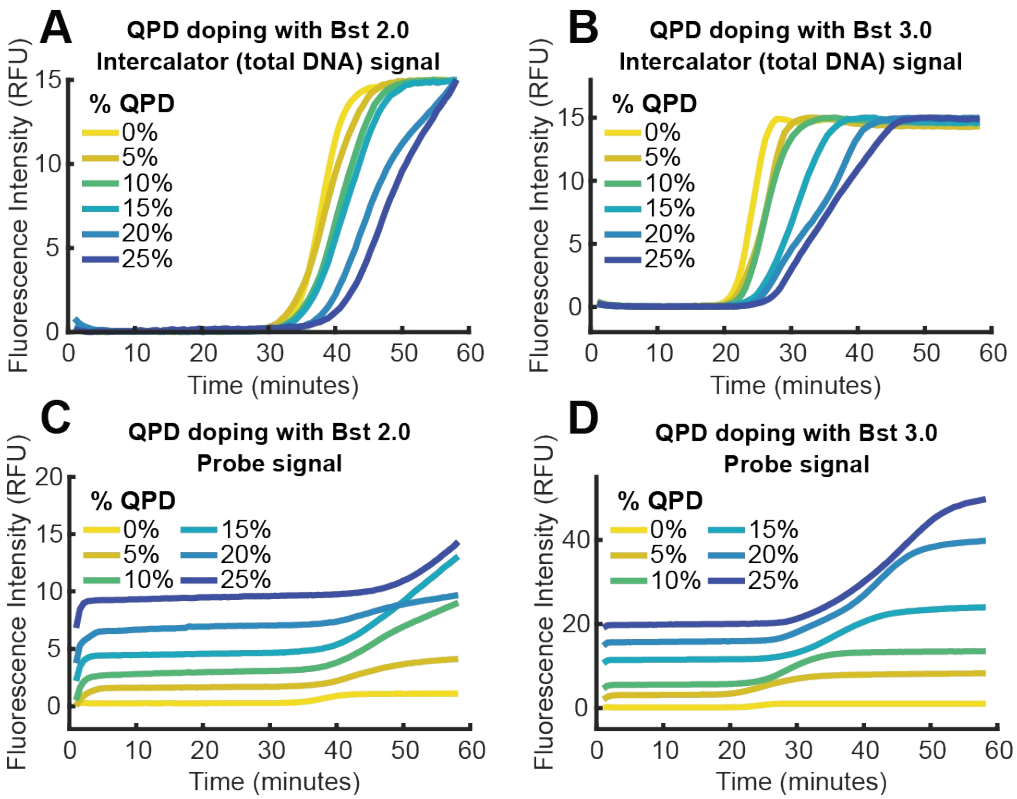

Figure S3. Amplification traces from either intercalator or probe in QPD doping reactions. Reactions with either Bst 2.0 or Bst 3.0 were supplemented with intercalator (A and B). Intercalator signals confirm that the presence of QPD delays amplification times that agreed with TTPs calculated from the probe signal alone (C and D).