

SUPPLEMENTAL MATERIAL

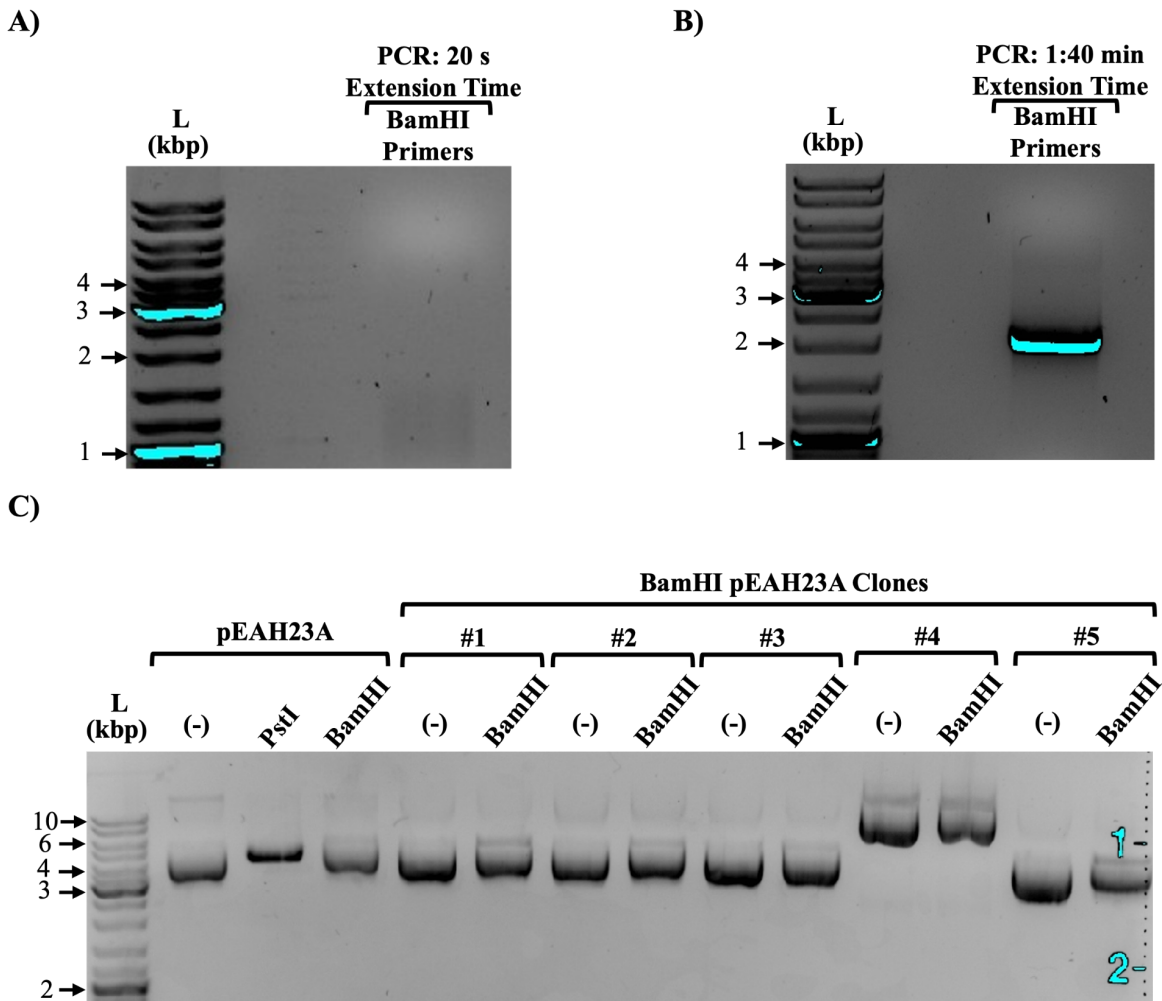


FIG. S1 Unsuccessful site directed mutagenesis of BamHI restriction site insertion into pEAH23A. Q5 PCR of pEAH23A parent plasmid with BamHI primer set designed to introduce a BamHI restriction site into the *lac* operator. PCR was initially performed unsuccessfully with an extension time of 20 seconds (A) and later repeated with an extension time of 1 minute and 40 seconds which yielded an amplified product at ~2000 bp with scarce amplification at the expected ~ 4000 bp (B). Further KLD and transformation was performed on the amplified PCR product to complete the SDM. C) BamHI restriction digests were performed on the isolated plasmids from transformants recovered after SDM. No digestion was observed in any plasmid and confirmed by PstI positive linear control and BamHI negative control digestion of pEAH23A. DNA ladder (L) in kilobases (kbp). Blue coloring and labels were unintentionally captured by the ChemiDoc Imaging System and are to be ignored as it is not part of the figure.

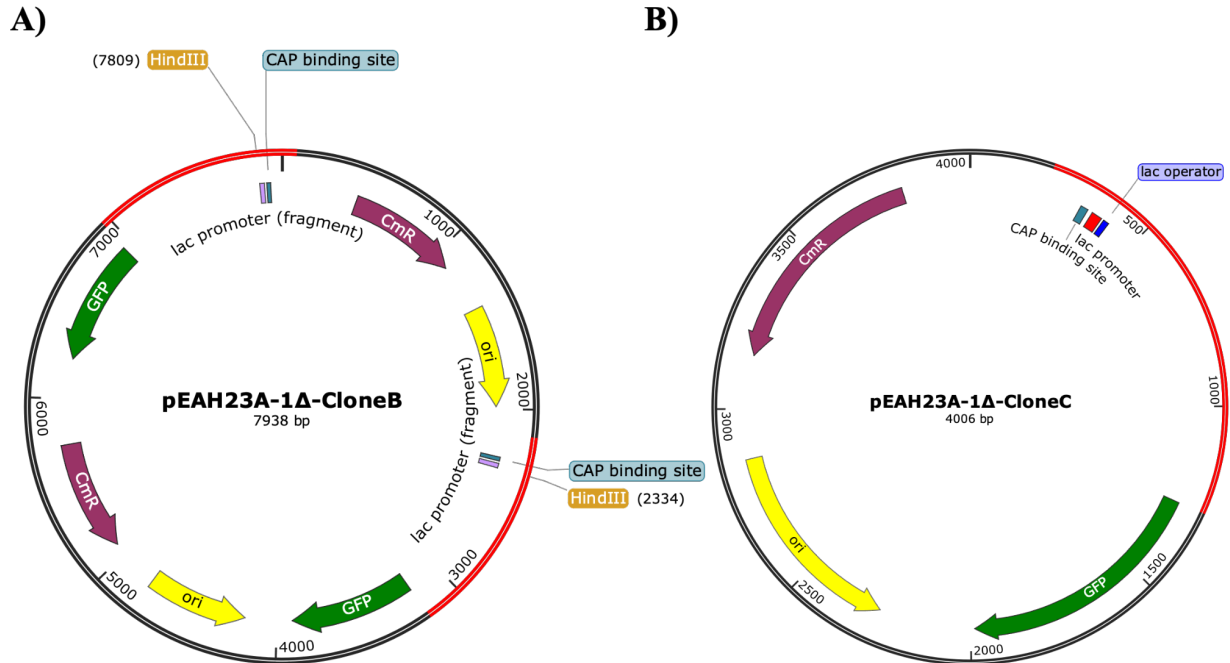


FIG. S2 Plasmid maps of pEAH23A-1Δ Clone B and Clone C. **A)** Plasmid pEAH23A-1Δ Clone B (7938 bp) with two GFP coding sequences downstream of *brkA* promoters with mutated *lac* operator regions and shortened *lac* promoter sequences (pink box, 25 bp). This construct also carries an additional *ori* (yellow) and chloramphenicol resistance gene (mauve). **B)** Plasmid pEAH23A-1Δ Clone C (4006 bp) with exact sequence to pEAH23A. Created with SnapGene.