

SUPPLEMENTAL MATERIAL

TABLE. S1 Plasmids and *E. coli* strains used in the project including sequences.

See attached supplemental table.

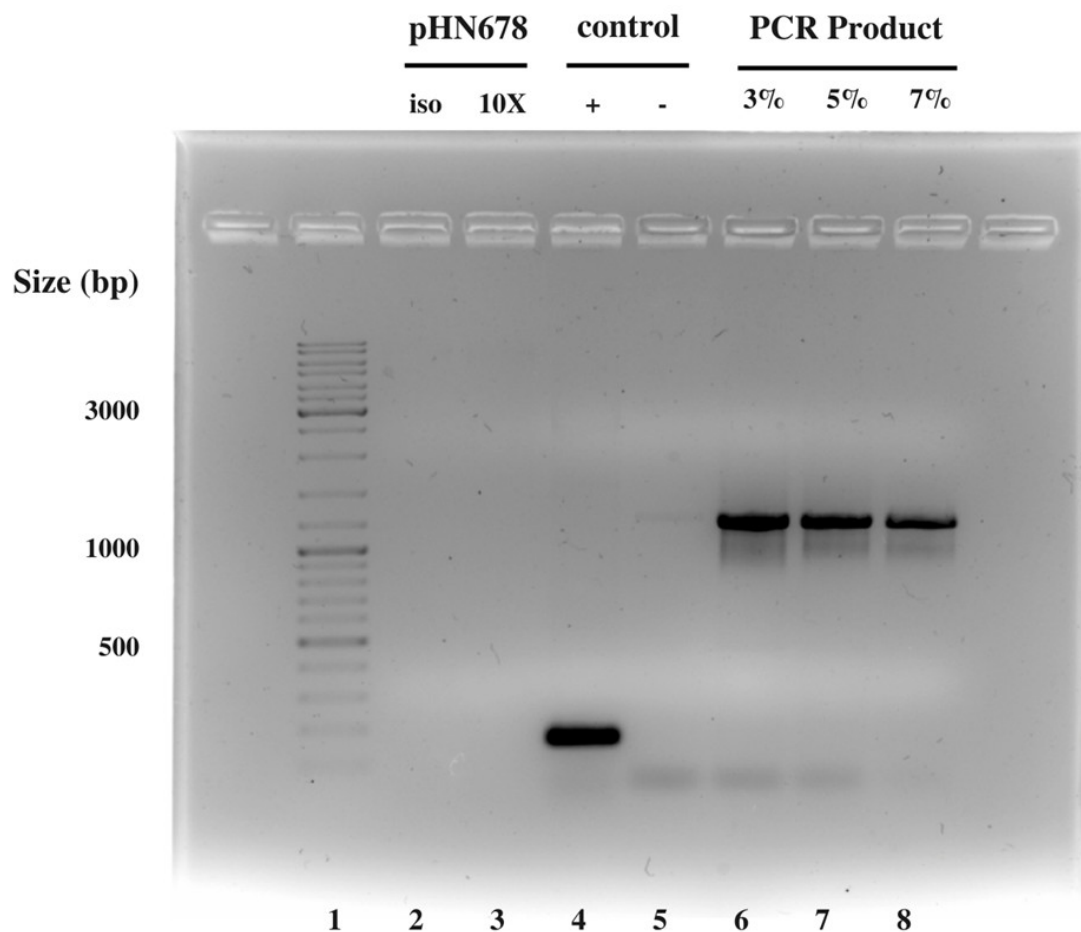


FIG. S1 PCR Amplification confirmed *lacI^Q* insertion into pENS (1200 bp). PCR was conducted to amplify *lacI^Q* from pHN678 isolates and run on 1.5% agarose gel using RedSafe dye (Thermo Fisher Scientific) on the ChemiDoc Imaging Apparatus (BioRad) at 530 nm using SybrSafe settings. Lanes 1-8: molecular marker O'GeneRuler DNA Ladder (Thermo Fisher Scientific), PHN678 isolate, PHN 678 10X, positive control pUC19 (200 bp), negative control pENS, and PCR-amplified *lacI^Q* samples of three differing percentages of DMSO (3%, 5%, 7%). Detection of thick bands at 1200 bp confirmed *lacI^Q* insertion.

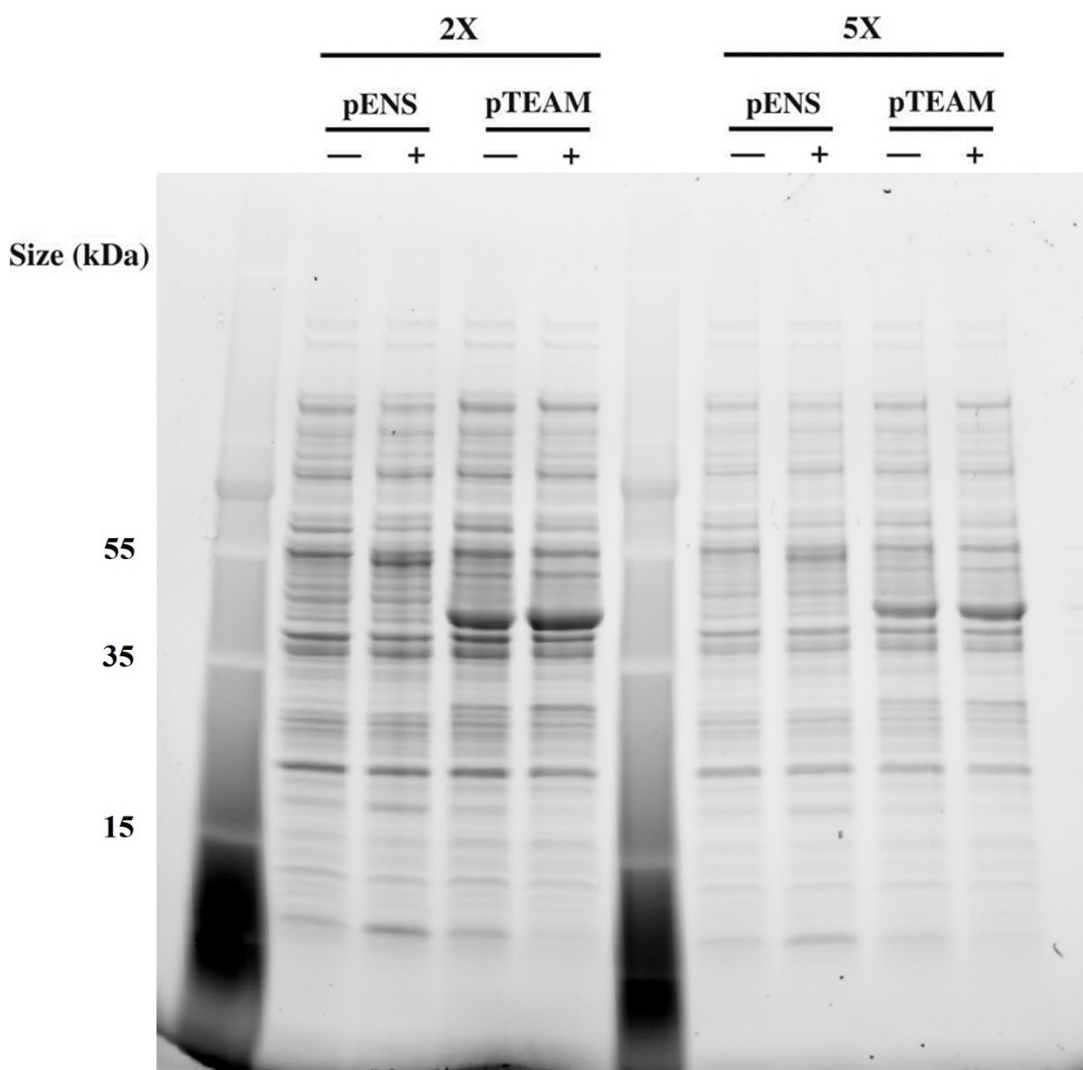


FIG. S2 Protein Quantification of SDS-PAGE gel confirms even protein loading and provides evidence of LacI expression. Cells were grown overnight in LB-AMP without or with allolactose isopropyl β -D-1-thiogalactopyranoside (IPTG), labelled with minus (-) or plus (+) symbols. Bacterial cell lysates were analyzed at concentrations of 2X or 5X. Stain-free imaging done by ChemiDoc Imaging Apparatus (BioRad).