SUPPLEMENTAL MATERIAL

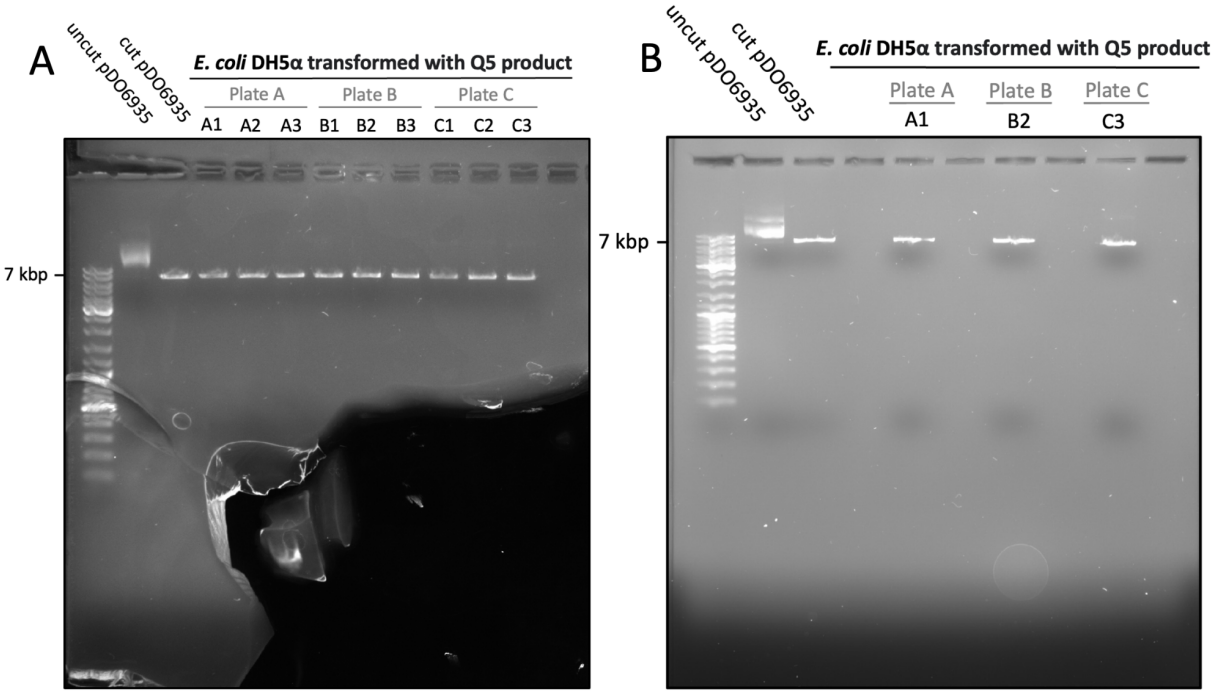

FIG. S1 Gel electrophoresis of isolated plasmids from *E. coli* DH5α cells transformed with Q5 product shows the expected 7 kbp band indicating plasmid of correct size isolated. (A) 3 clones from each plate of transformed DH5α cells with Q5 product were isolated and digested with HindIII restriction enzyme to linearize and were run on a 1% agarose gel to visualize alongside a cut and uncut control pDO6935. All clones show a band at 7 kbp showing that a plasmid of the correct size was isolated. Gel ripped when imaging therefore, (B) one linearized plasmid from each plate was selected to rerun on a new gel to confirm no presence of lower bands.

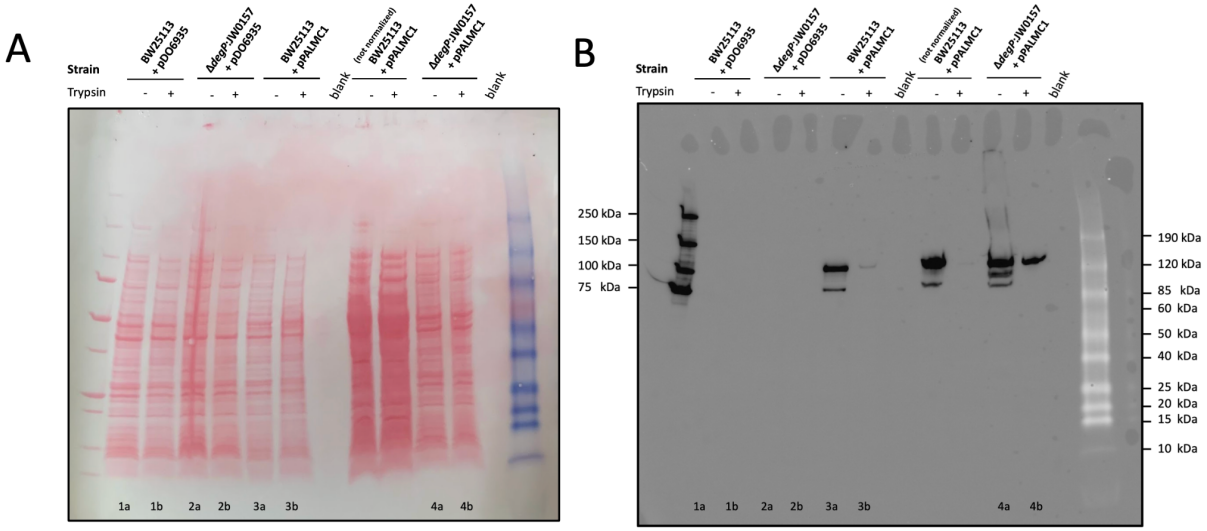

FIG. S2 Full Ponceau stain and western blot of *E. coli* BW25113 and JW0157 cells transformed with either pDO6935 or pPALMC1 with +/- trypsin treatment showing equal loading of sample amount in SDS-PAGE. Sample overnight culture OD_{600} readings were standardized before trypsin treatment and lysing, and equal volumes (15µL) were loaded in the gel. (A) Ponceau stain verifying equal loading of samples in the SDS-PAGE and successful western transfer onto blot membrane. (B) Full western blot of the one shown in Figure 2 including the old lysates (not-normalized) of BW25113 *E. coli* cells transformed with pPALMC1 with PBS (-) or trypsin (+) treatment to confirm BrkA expression patterns seen in new lysates (normalized) of the same conditions.

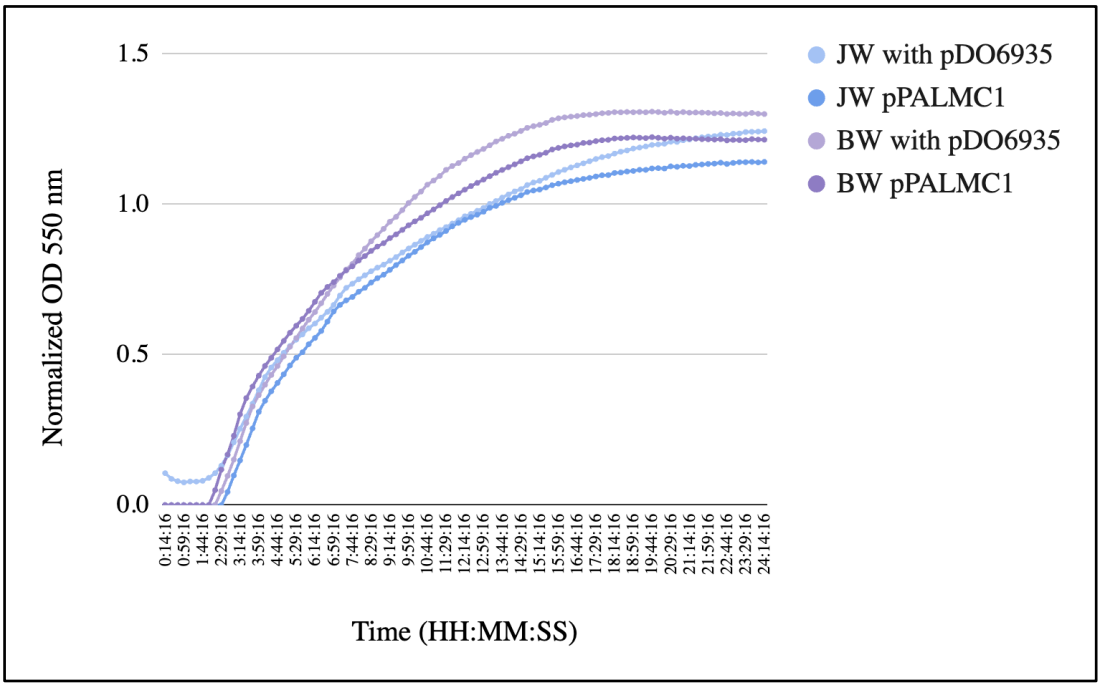

FIG. S3 24-hour growth curve of WT BW25113 and KO JW0157 *E. coli* cells transformed with either pDO6935 or pPALMC1 suggests no major differences in growth rates of samples for the western blot. Growth rates, measured by OD_{550} readings, of 1:100 dilutions of overnight cultures for western blot samples were read in the BioTek Plate Spectrophotometer for 24 hours at 37°C. OD readings were normalized to blank LB broth supplemented with 100ng/µL ampicillin and 50ng/µL kanamycin. All 4 samples show similar growth rates suggesting varying cellular growth rates are not explanatory of the varying BrkA expression levels shown on the western blot.

pPALMC1 Sequence: 6945bp

5’-

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