

## Figure S1. Purification of *E. coli* EnvZ periplasmic domain.

6xHis-EnvZ<sub>per</sub> fusion protein was purified from inclusion bodies under 6 M guanidine-HCl denaturing conditions using nickel affinity chromatography. Fractions of denatured protein were pooled and refolded by serial dilution of guanidine-HCl concentration to 3 M and rapid dilution into refold buffer, followed by thrombin digestion to remove the 6xHis-tag. The resultant samples were analysed by 12% poly-acrylamide SDS-PAGE and Coomassie Brilliant Blue staining: total cell lysates before and after IPTG induction (lanes 1 and 2), fractions from Ni-NTA column elution (lanes 3-7), protein after refolding and thrombin cleavage (lanes 8 and 9, respectively).