Supplemental information to:

DUAL ROLES OF AN ESSENTIAL CYSTEINE RESIDUE IN ACTIVITY OF A REDOX-REGULATED BACTERIAL TRANSCRIPTIONAL ACTIVATOR

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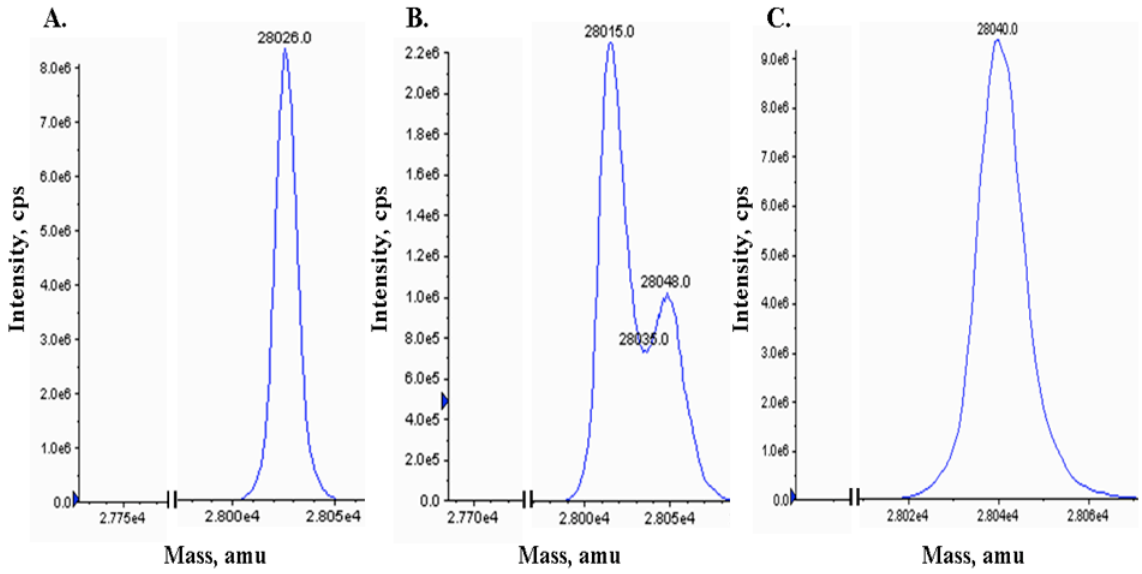
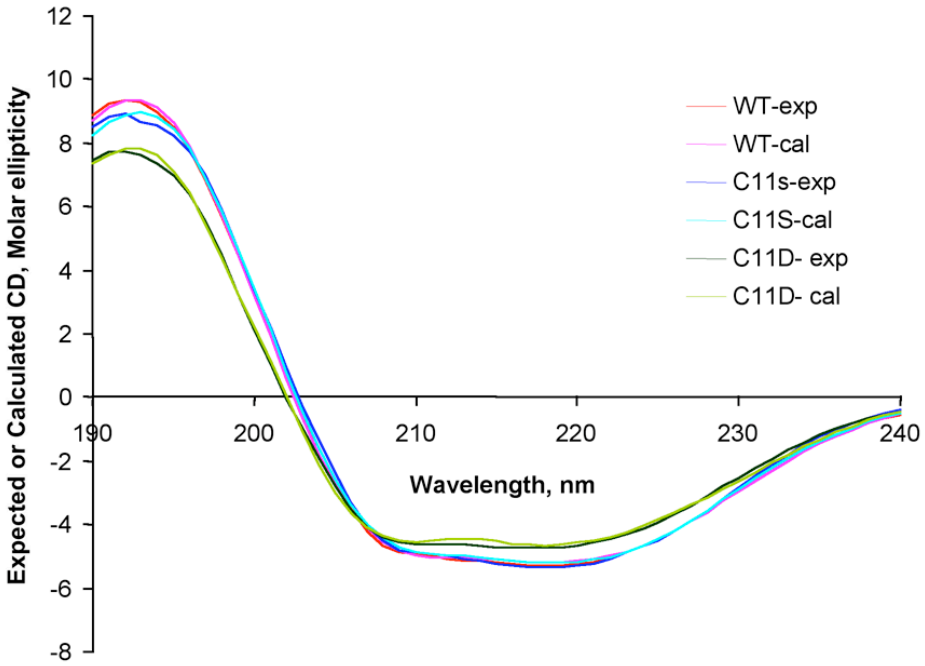
Supplementary Figure 1. Parent ion analysis of CprK by mass spectrometry. Mass spectrometric analysis confirmed that CprK and variants are full-length proteins, with wild-type CprK (A) showing a mass of 28026.0 Da, C11S (B) of 28015.0 Da, and C11D (C) of 28040.0 Da.

Supplementary Figure 2. Stability of wild-type CprK and Cys11 variants. Melting curves of wild-type and variant proteins were obtained by recording the CD at 222 nm from 20°C to 80°C in a buffer containing 50 mM Tris, 300 mM NaCl, and pH 7.5.

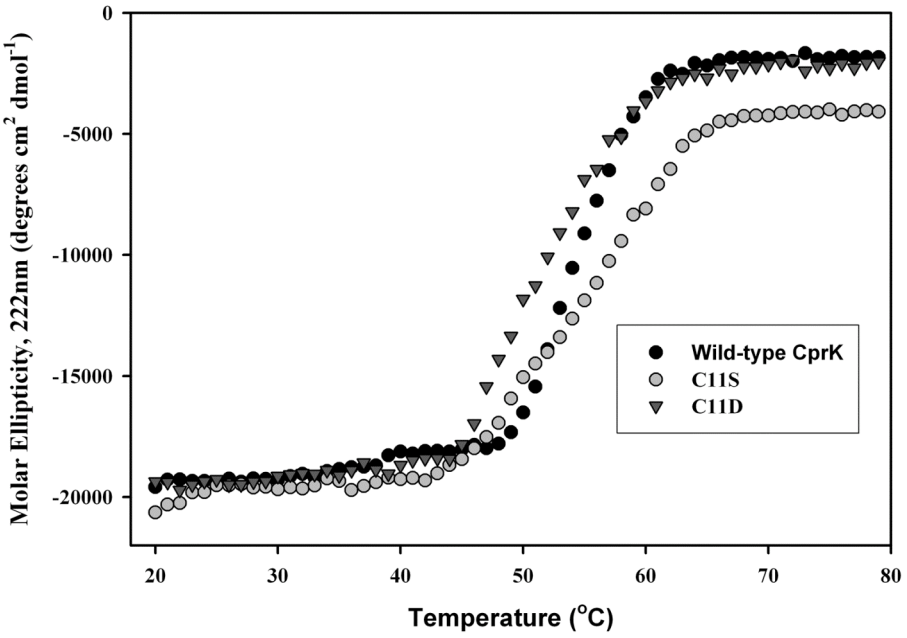
Supplementary Figure 3. **Circular dichroism analysis.** Superimposed CD spectra of WT, C11S and C11D variants. Data presented are representative of three independent experiments. Samples were prepared in 10 mM potassium phosphate buffer, pH 7.5.



Supplementary Figure 1



Supplementary Figure 2



Supplementary Figure 3