Supporting Information

for

Native *E. coli* SufA, Co-expressed with SufBCDSE, Purifies as a [2Fe-2S] Protein and Acts as an Fe-S Transporter to Fe-S target Enzymes

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Figure S1. Comparison of Fe-S SufA purified from wild-type SufABCDSE and SufABCDSE ($SufD^{H128A}$) expression systems**.** (A) Elution profile from anion exchange chromatography of freeze-thaw extracts prepared anaerobically from TOP10 strains overexpressing wild-type SufABCDSE or SufABCDSE containing the SufD H128A mutation. Lysates containing equal amounts of total protein were purified using identical elution conditions. The peak containing SufA in both lysates is indicated with an arrow. (B) Comparison of UV-Vis spectra of SufA isolated from anion exchange chromatography of freeze-thaw lysates from wild-type SufABCDSE or SufABCDSE containing the SufD H128A mutation as shown in (A). Equal amounts of SufA protein were present in both samples.

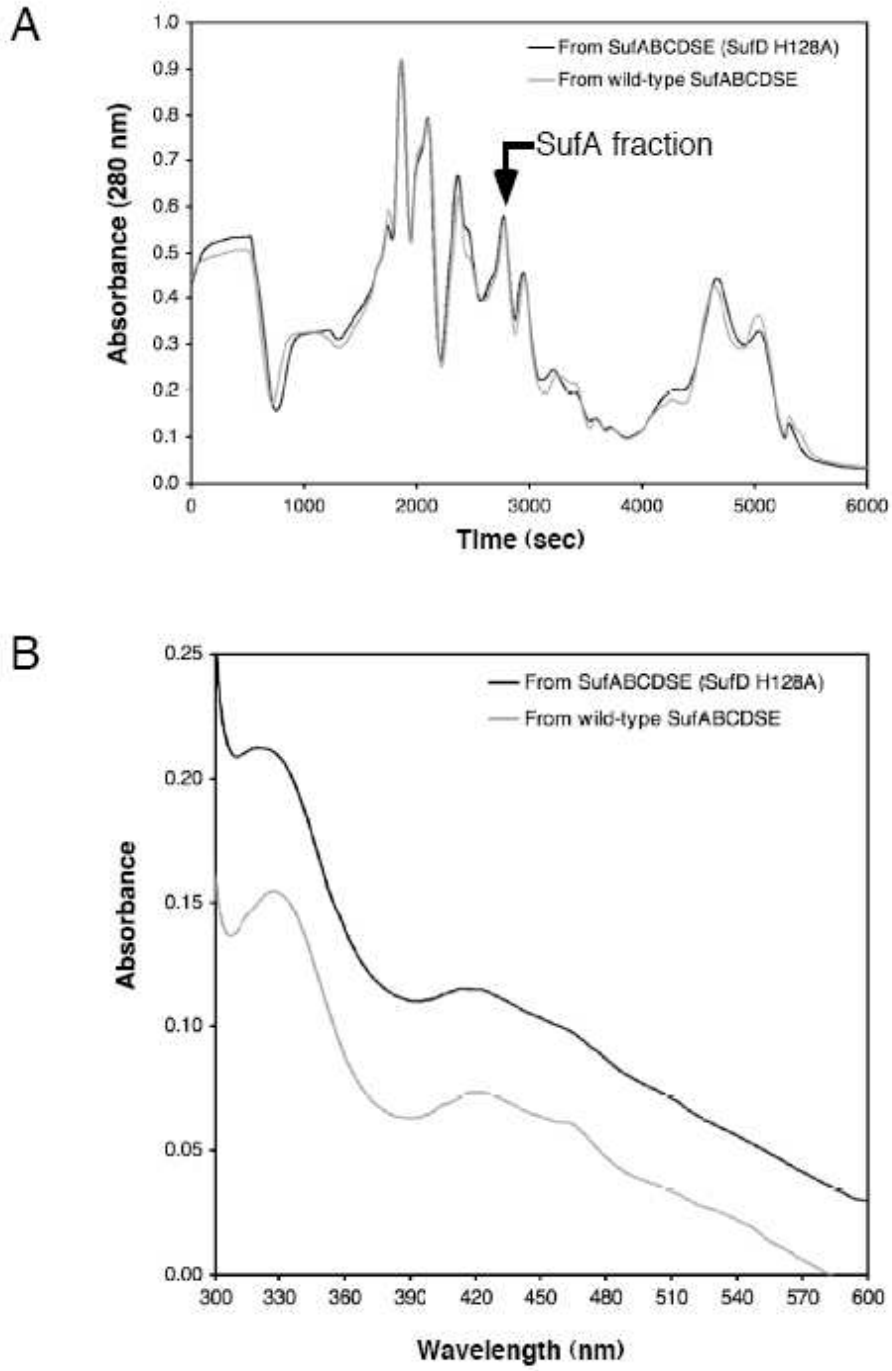

Figure S2. Low temperature (15K) resonance Raman spectrum of native ^{57}Fe-S SufA. The spectrum was recorded using 441 nm excitation from a Cd^{+} laser with 80 milliwatts of laser power at the sample (12 mM, 0.6 iron and sulfide/monomer). Raman contributions from the buffer i.e mainly from the "ice band" at 230 cm^{-1} have been subtracted.