Frataxin accelerates [2Fe-2S] cluster formation on the human Fe-S assembly complex

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Supporting Information

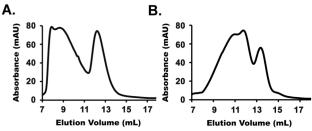


Figure S1. Elution profile of Fe-S assembly reaction solutions showing that cysteine desulfurase generates HMWS during Fe-S assembly reactions under scaled up Standard conditions. Reaction mixtures including (A) human SD or (B) *E. coli* IscS and DTT, Fe^{2+} , and L-cysteine were incubated for 45 min at 12 ° C. The samples were then separately applied to an anaerobic S-200 column and monitored by absorbance at 280 nm. The HMWS and cysteine desulfurase elute in fractions 8-12, and 12-14, respectively.

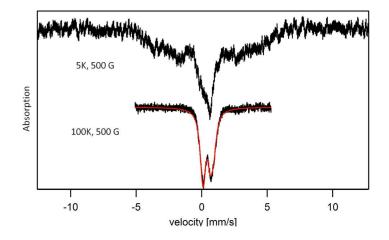


Figure S2. Mössbauer spectra for HMWS generated from SD sample. A 600 μ M SD sample was reacted with 5 mM Fe²⁺, 5 mM L-cysteine, and 18 mM DTT for 60 min. The HMWS was isolated on a S200 column. Mössbauer conditions listed in figure. The red line represents a simulation of the 100 K data.