

SUPPLEMENTARY MATERIAL

FIGURE S1. Distribution of Fe-S cluster biogenesis genes in archaea. The phylogenetic tree was based upon 16S rRNA sequences. The tree was constructed with the ME algorithm in MEGA4. Bootstrap analysis was performed with 1,000 replicates, and values greater than 70 % are labeled on the nodes. The hyperthermophilic bacteria *Thermotoga* and *Aquifex* represent the outgroup. CSD, cysteine desulfurase; U-type, U-type scaffold proteins; A-type, A-type scaffold proteins; ApbC/Nbp35, a potential Fe-S cluster carrier protein. The recombinant CSD homolog from *Methanothermobacter thermautotrophicus* (MTH1389) was shown not to possess cysteine desulfurase activity (unpublished data).

