## **Supporting Information**

Anderson et al. 10.1073/pnas.1103623108

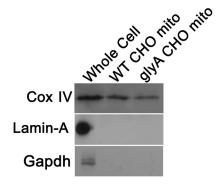


Fig. S1. Purity of Chinese hamster ovary (CHO) mitochondria. Mitochondria that were purified from CHO cells for the experiment described in Table 1 exhibited no nuclear or cytosolic contamination using immunoblots against GAPDH and Lamin A.

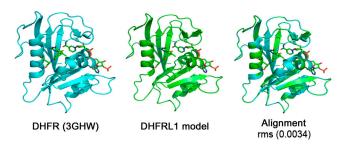


Fig. S2. Model of dihydrofolate reductase-like protein 1 (DHFRL1) protein. The protein sequence of DHFRL1 was modeled using the structure of human dihydrofolate reductase (DHFR) [Protein Data Bank (PDB) ID code 3GHW] as a template. The energy minimized model of DHFRL1 was produced in SWISS-PDB viewer and the model alignment and images were made in PyMOL. The rms between DHFR and the DHFRL1 model was determined to be 0.0034 indicating high similarity in structure.