

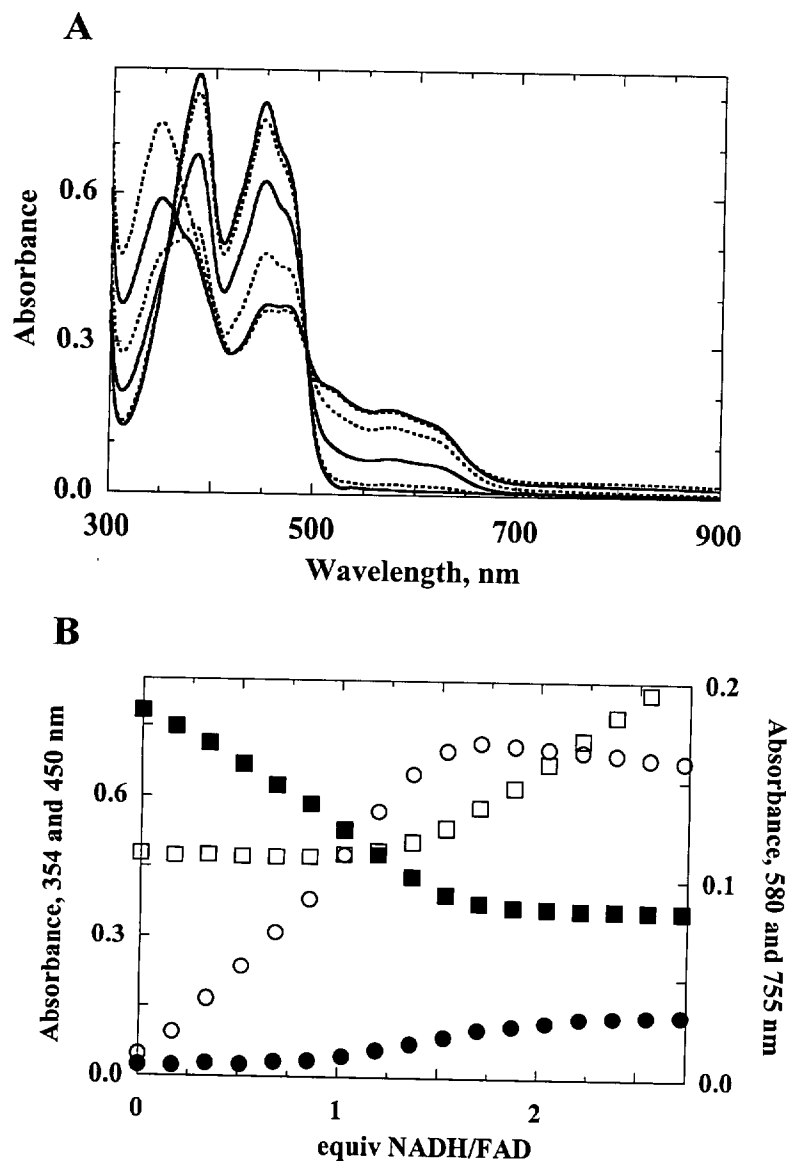
Supporting Information, A Novel Prx Reductase System from *C. pasteurianum*, Reynolds et al.

Figure S1. Anaerobic NADH titration of Cp34. The titration was carried out in 25 mM potassium phosphate buffer at pH 7.0 in a total volume of 600 μ L at 25 $^{\circ}$ C. Cp34 (37.2 nmol) was titrated with a 4.89 mM anaerobic solution of NADH. Spectra were recorded after each addition when no further absorbance changes occurred. *Panel A* shows spectra obtained after the addition of 0, 0.17, 0.68, 1.19, 1.70 and 2.21 equiv NADH/FAD in order of decreasing A_{450} . *Panel B* depicts the absorbance changes at 354 (open squares), 450 (closed squares), 580 (open circles), and 755 nm (closed circles) versus equivalents of NADH added. Intersection of the linear portions of the 354 nm absorbance changes (at the isosbestic point between FAD and FADH $^{\bullet}$) indicates oxidation of 1.34 equiv of NADH/FAD. For comparison, similar titrations of TrxR and AhpF consume about 1.6 and 2.6 equiv NAD(P)H/FAD, respectively (see References 18 and 5 of main manuscript).