Supplementary Information

Enhancement of protein stability by an additional disulfide bond designed in human neuroglobin

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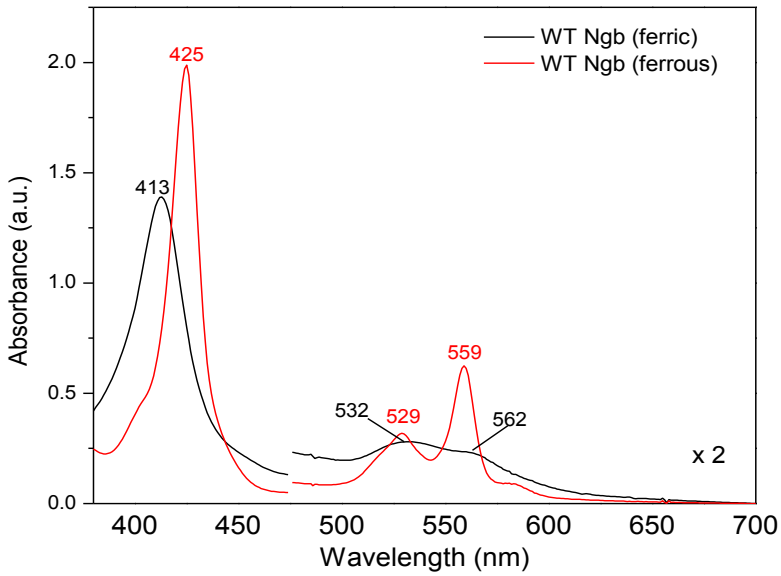

Figure S1: UV-Vis spectra of WT Ngb in ferric (black line) and ferrous (red line) oxidation states (10 μM protein in 100 mM potassium phosphate buffer, pH 7.0, 25 ^{o}C).

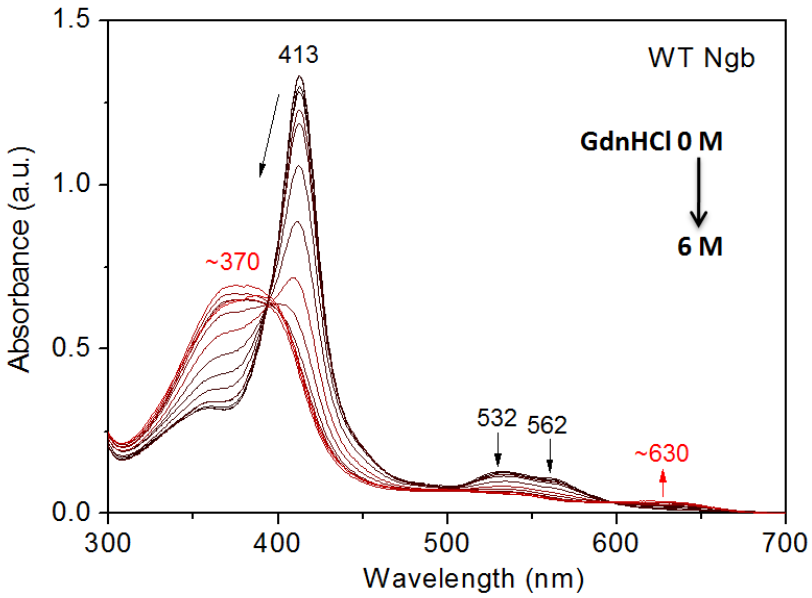

Figure S2: UV-Vis spectra of Gdn ⊦HCl-induced unfolding of WT Ngb (10 μM protein in 100 mM potassium phosphate buffer, pH 7.0).

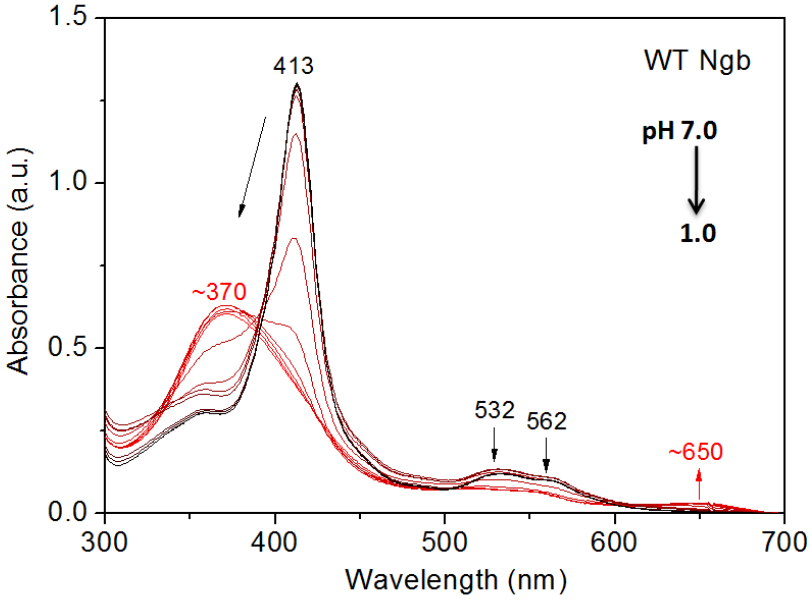

Figure S3: UV-Vis spectra of acid-induced unfolding of WT Ngb (10 μM).

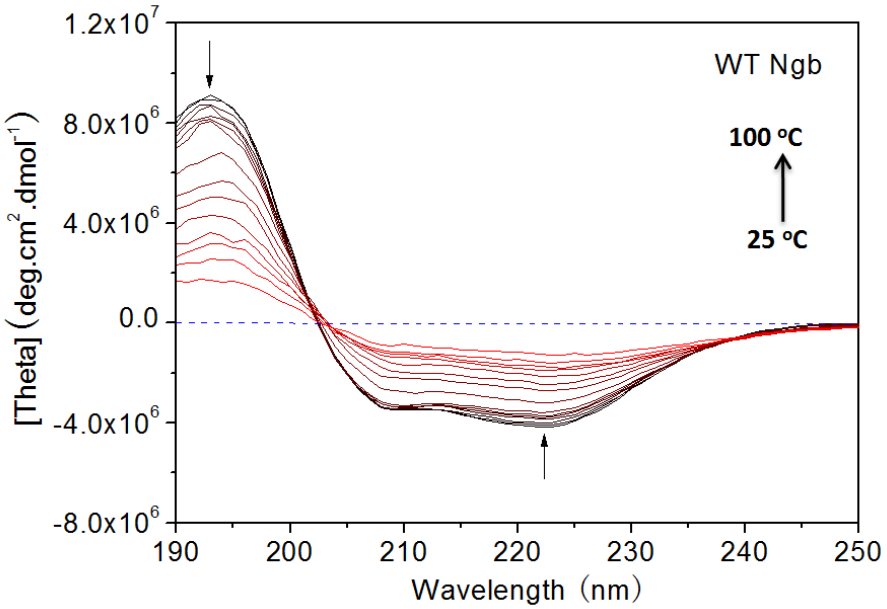

Figure S4: CD spectra of thermal-induced unfolding of WT Ngb (10 μM protein in 100 mM potassium phosphate buffer, pH 7.0).

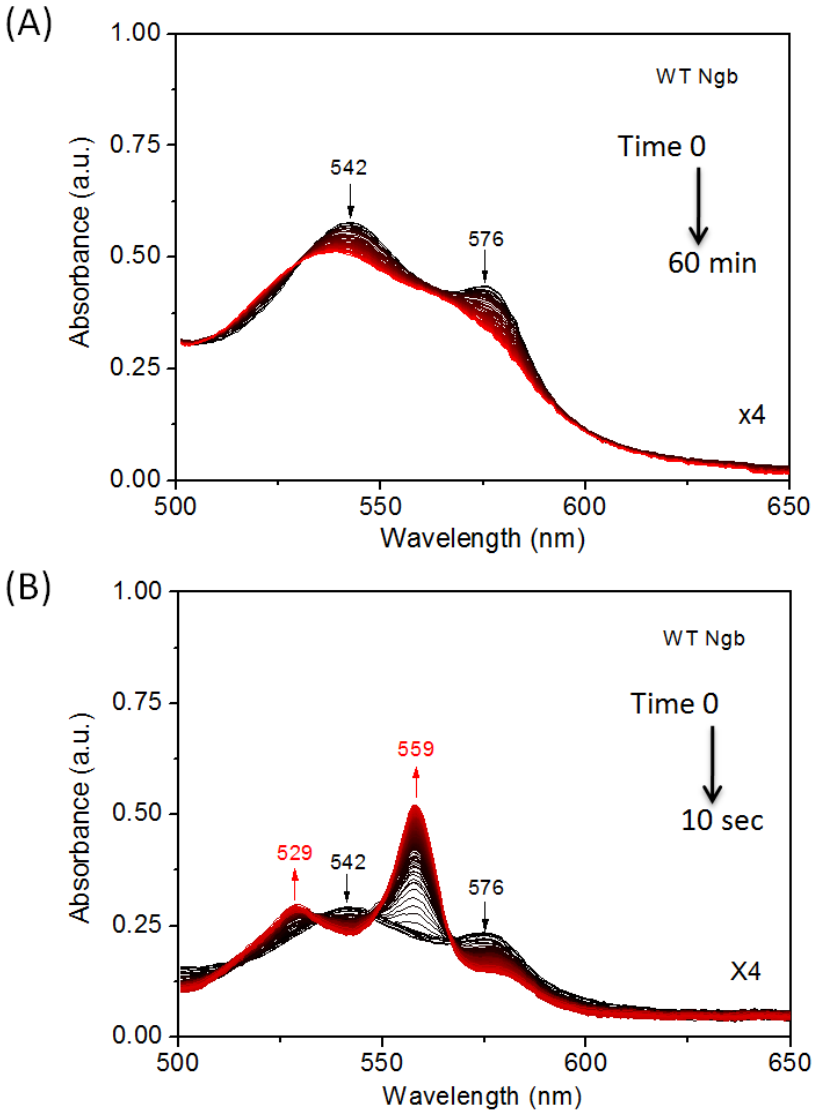

Figure S5: (A) UV-Vis spectra of autoxidation of oxy-WT Ngb (10 μM protein in 100 mM potassium phosphate buffer, pH 7.0) for 60 min at 25 ^{o}C. (B) Stopped-flow spectra of oxy-WT Ngb (5 μM protein in 100 mM potassium phosphate buffer, pH 7.0), in reaction with 1 mM dithionite in the same buffer for 10 sec at 25 ^{o}C.