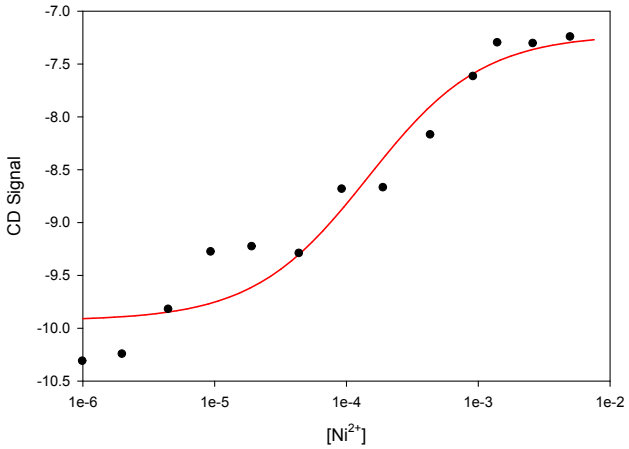
Electronic Supporting Information

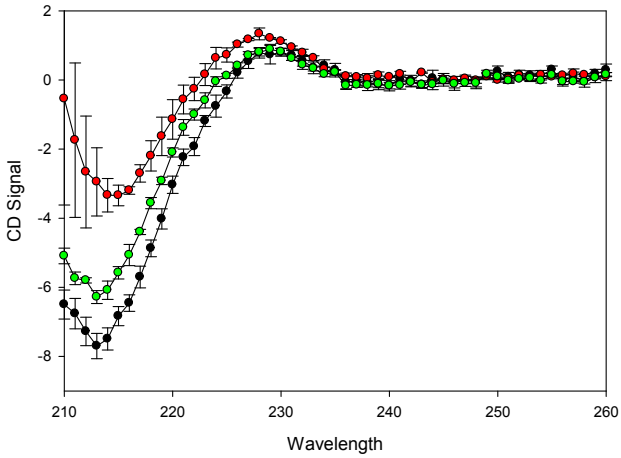
NICKEL REDUCES CALCIUM-DEPENDENT DIMERIZATION BY NEURAL CADHERIN

Matthew P. Dukes, Rhianon Kay Rowe, Taylor Harvey and Susan Pedigo*

Department of Chemistry and Biochemistry, University of Mississippi, University, MS 38677



ESI Figure 1: Titration of NCAD12 as a function of nickel concentration. The CD signal is plotted against total nickel concentration. The solid line is simulated based on parameters resolved from analysis of experimental data reported in Table 1. Direct analysis of the data using the Adair equation yielded a value of 7000 ± 3000 M^{-1}.



ESI Figure 2: Circular Dichroism spectra of apo- (black), Ca^{2+}-added (8 mM; red) and Ni^{2+}-added (8 mM; green) in 10 mM HEPES, 140 mM NaCl, pH 7.4. Protein concentration was 50 µM, path length was 0.5 mm. Data show a significant but small effect from binding of Ni^{2+} as compared to Ca^{2+} binding. This led to the poor signal to noise in the direct Ni^{2+}-titration of NCAD12 reported in ESI Figure 2.