Beyond the detergent effect: A binding site for sodium dodecyl sulfate (SDS) in mammalian apoferritin

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SUPPLEMENTARY MATERIAL

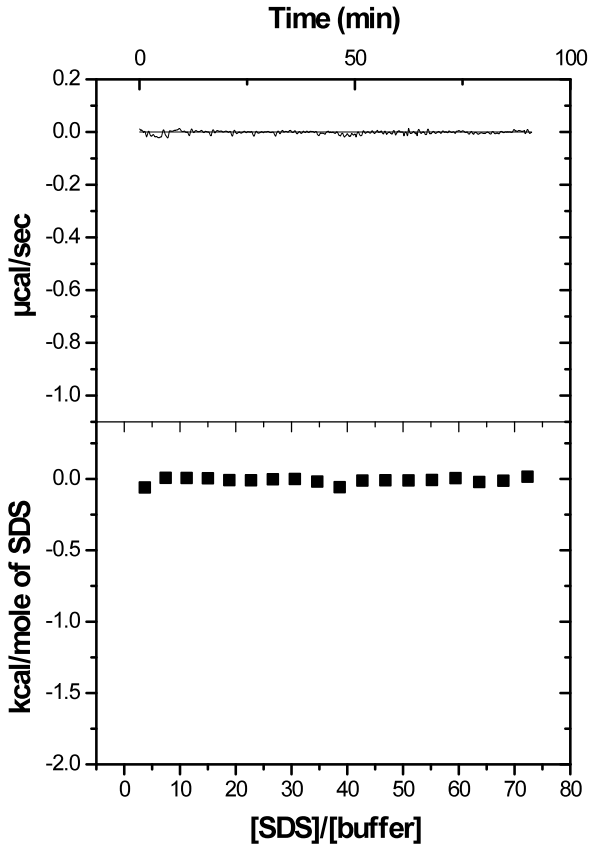

Figure S1. Buffer control for the ITC experiment—SDS titration into buffer. Upper panel shows the enthalpogram corresponding to titration of 3.47 mM SDS into buffer; the lower panel shows the binding isotherm derived from this titration. This control shows that no significant heat signature accompanies the process of micelle dissolution.

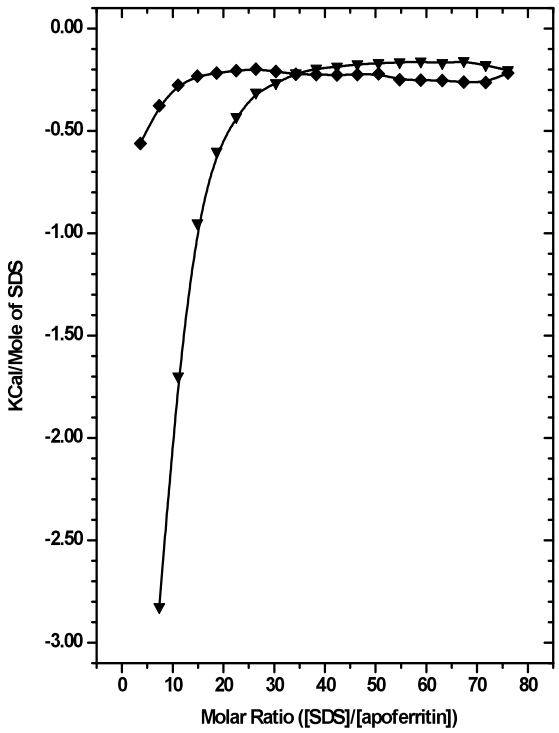

Figure S2. SDS and isoflurane compete for binding to apoferritin. Shown are binding isotherms derived from ITC experiments for titrations of SDS into apoferritin in the presence (diamonds) or absence (triangles) of 10 mM isoflurane.

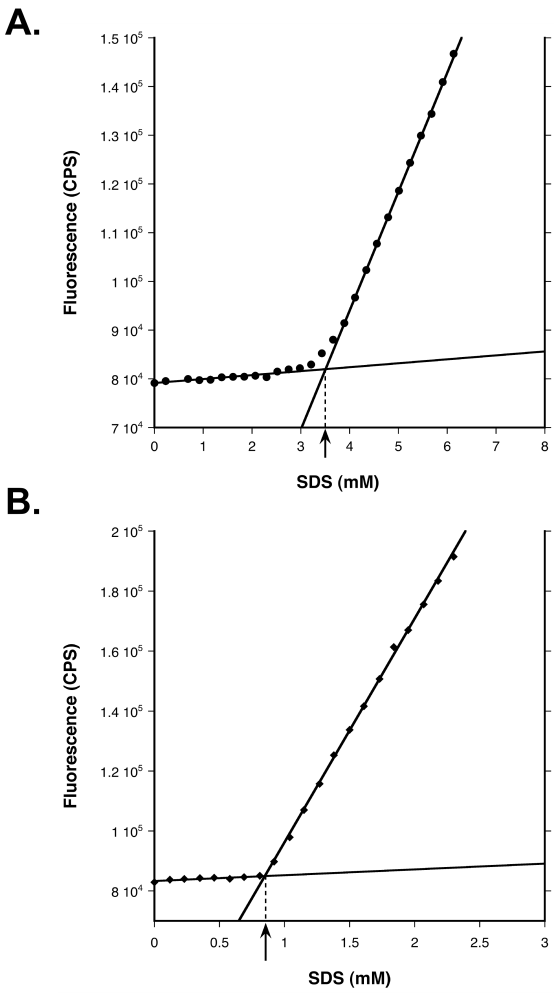

Figure S3. Critical micelle concentration (CMC) determination for SDS. Representative fluorescence titrations are shown for 10 mM sodium phosphate pH 7 (panel A) and 20 mM sodium phosphate, 130 mM NaCl pH 7 (panel B); the arrow shows the value for the CMC in each panel. Titrations were done in triplicate. The CMC values obtained are 3.55 ± 0.04 mM for SDS in 10 mM sodium phosphate pH 7, and 820 ± 56 μM for SDS in 20 mM sodium phosphate, 130 mM NaCl pH 7.