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Article

Myoglobin Interaction with Lactate Rapidly Releases Oxygen: Studies on Binding Thermodynamics, Spectroscopic and Oxygen Kinetics

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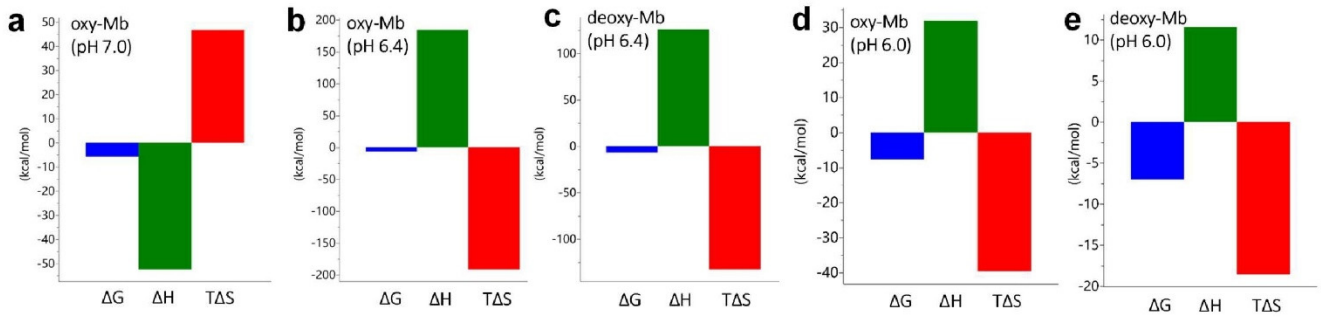
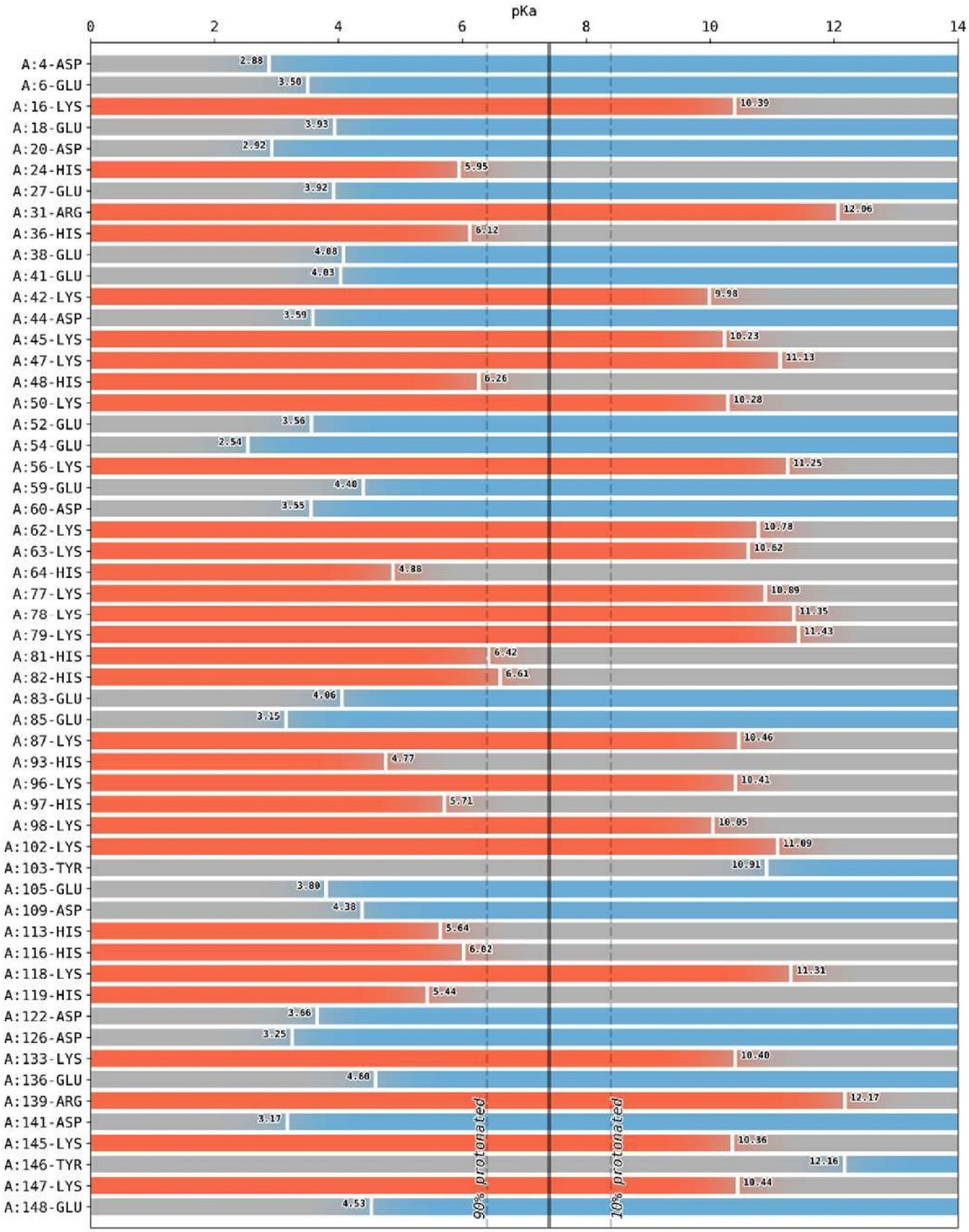
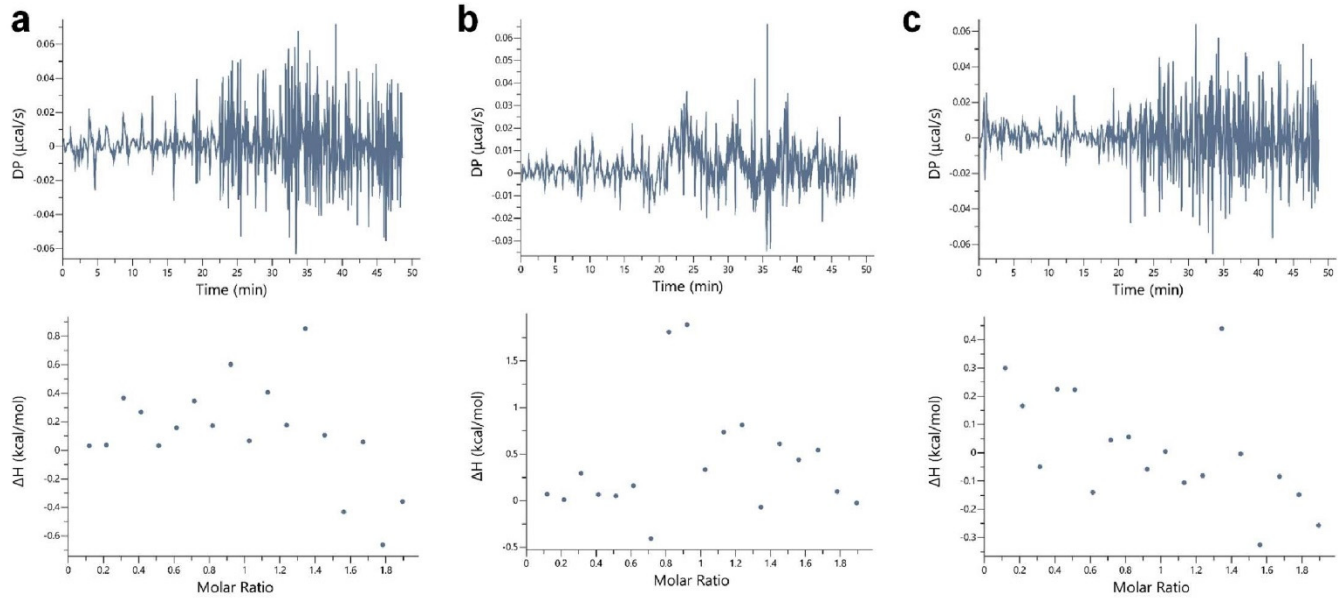


Supplementary Figure S1. A representative ITC signature plot of oxy-Mb bound lactate at pH 7.0 (deoxy-Mb did not bind LAC at pH 7.0) (a), oxy-Mb bound LAC (b) and deoxy-Mb bound LAC (c) at pH 6.4, oxy-Mb bound LAC (d) and deoxy-Mb bound LAC (e) at pH 6.0.



Supplementary Figure S2: Different pKa values of residues of horse heart muscle Mb (PDB ID: 2V1K) determined by PROPKA.



Supplementary Figure S3. Representative ITC plots of binding interactions of LAC with lysozyme at **(a)** pH 7.0, **(b)** pH 6.4 and **(c)** pH 6.0. LAC did not bound to lysozyme in all the test pH buffers. Thus, lysozyme was treated as a negative control protein in all the ITC binding studies.