Resonance Raman Interrogation of the Consequences of Heme Rotational Disorder in Myoglobin and its Ligated Derivatives

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Figure S1. The difference spectrum of native deoxyMb with sulfate and native deoxyMb without sulfate, (A); the RR spectra of native deoxyMb with sulfate, (B); and 20 minute reconstituted deoxyMb with sulfate, (C).



Figure S2. The difference spectra of native and reversed form for proto reconstituted deoxyMb, (A); and equibarted and reversed d12 deoxyMb, (B).



Figure S3. High frequency RR spectra for native deoxyMb, (A); 20 minute reconstituted deoxyMb, (B); reversed deoxyMb, (C); and difference of native minus reversed deoxyMb, (D).



Figure S4. High frequency RR spectra for native MbCO, (A); 20 minute reconstituted MbCO, (B); reversed MbCO, (C); and difference of native minus reversed MbCO, (D).



Figure S5. High frequency RR spectra in the region 1800-2100 cm⁻¹ of native MbCO, (A); 20 minute reconstituted MbCO, (B); reversed MbCO, (C); and native minus reversed MbCO, (D). The bands appearing at 1964 cm⁻¹, 1937 cm⁻¹ and 1925 cm⁻¹ in both native and the reversed form for HHMb correspond to the CO stretching frequencies of conformational substates A_0 , A_1 , and A_3 of myoglobin.