SUPPORTING INFORMATION

A simple method for preparing poly(ethylene glycol) surface conjugated liposome encapsulated hemoglobins: physico-chemical properties, long-term storage stability, and their reactions with O_2, CO and NO.

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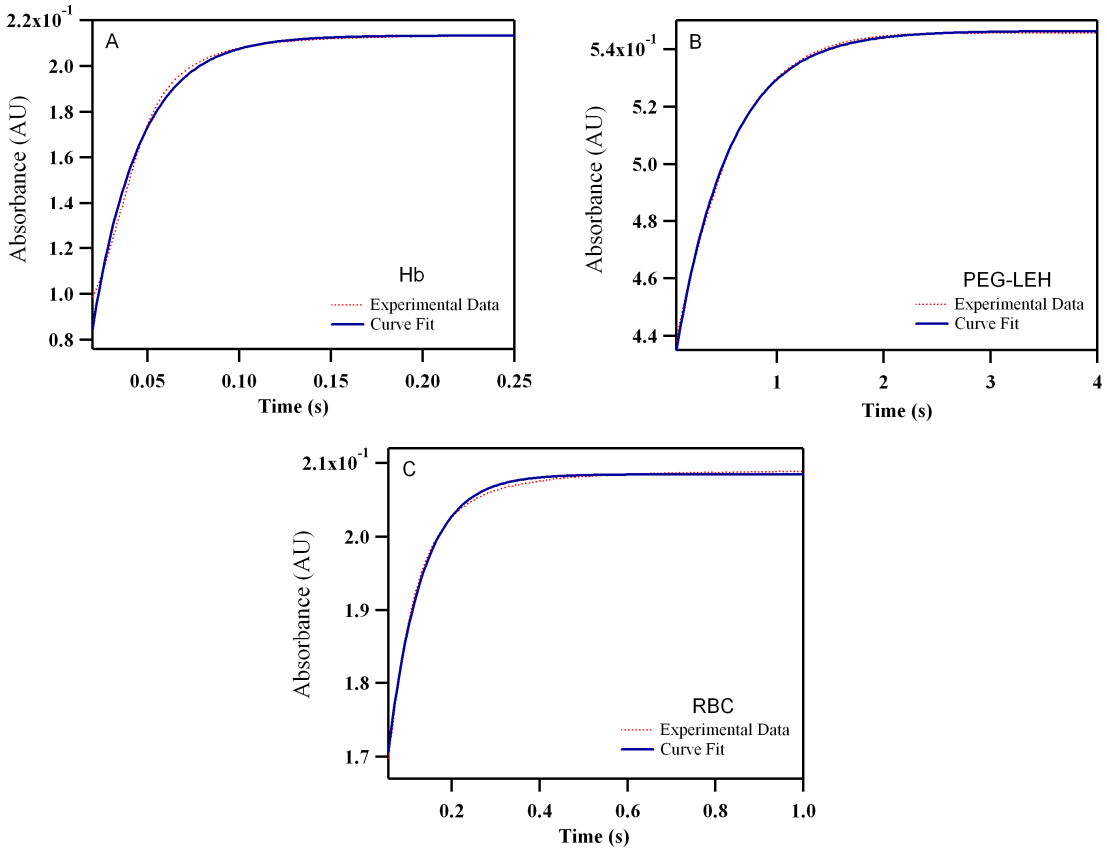

Figure S1: Time courses for deoxygenation of oxygenated bovine: (A) Hb (B) PEG-LEHs and (C) RBCs in the presence of 1.5 mg/mL of sodium dithionite. The experimental data shows an average of 8-10 kinetic traces for Hb/LEH and 3-4 kinetic traces for RBCs. For experiments with Hb and PEG-LEHs, solutions were made in 0.1 M Tris buffer (pH 7.4). For experiments with RBCs, solutions was made in PBS (pH 7.4), to avoid hypotonic shock and lysis of the RBCs. The reactions were monitored at 437.5 nm and 25^{o}C.

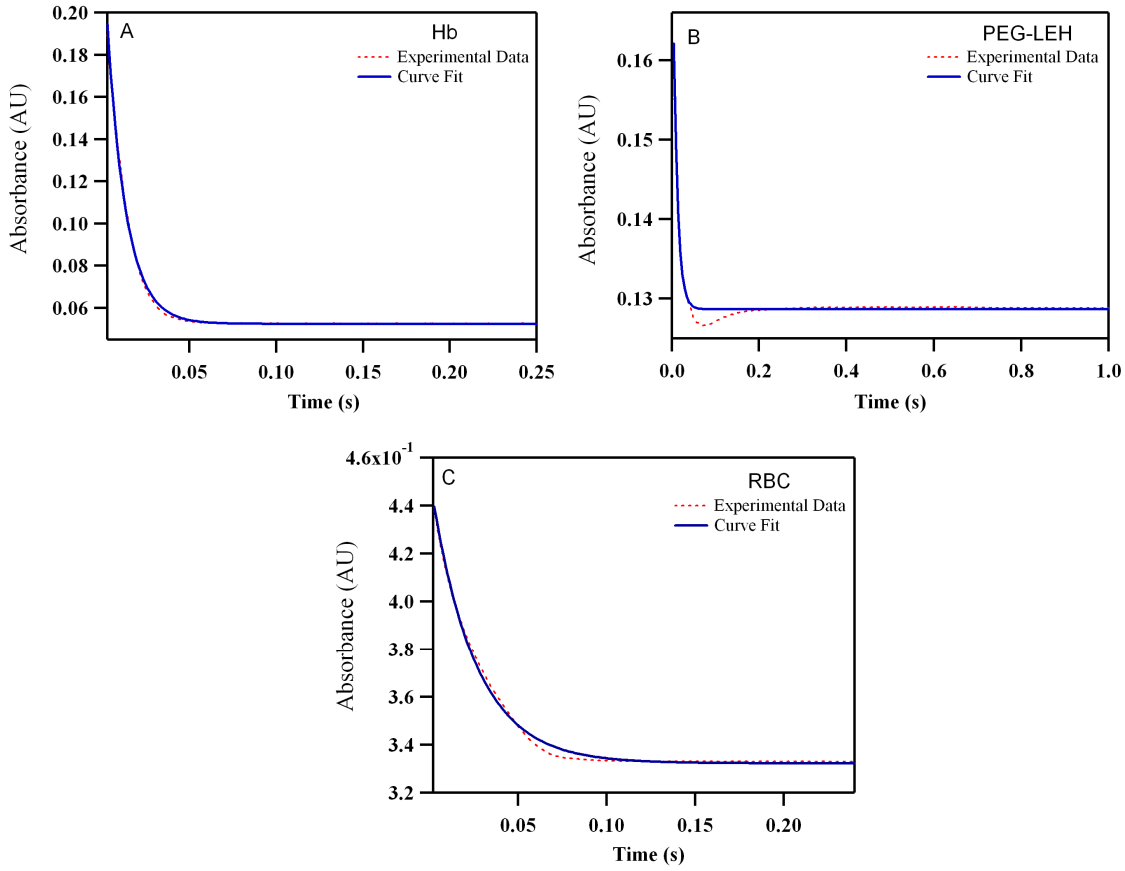

Figure S2: Time courses for CO (464 μM) association with deoxygenated bovine: (A) Hb (B) PEG-LEHs and (C) RBCs. The experimental data shows an average of 8-10 kinetic traces. For experiments with Hb and PEG-LEHs, both CO and Hb solutions were made in 50 mM Tris buffer (pH 7.4) in the presence of 1.5 mg/mL of sodium dithionite. For experiments with RBCs, CO and RBC, solutions were made in PBS (pH 7.4) in the presence of 1.5 mg/mL of sodium dithionite, in order to avoid hypotonic shock and lysis of RBCs. The reactions were monitored at 437.5 nm and 25^{o}C.

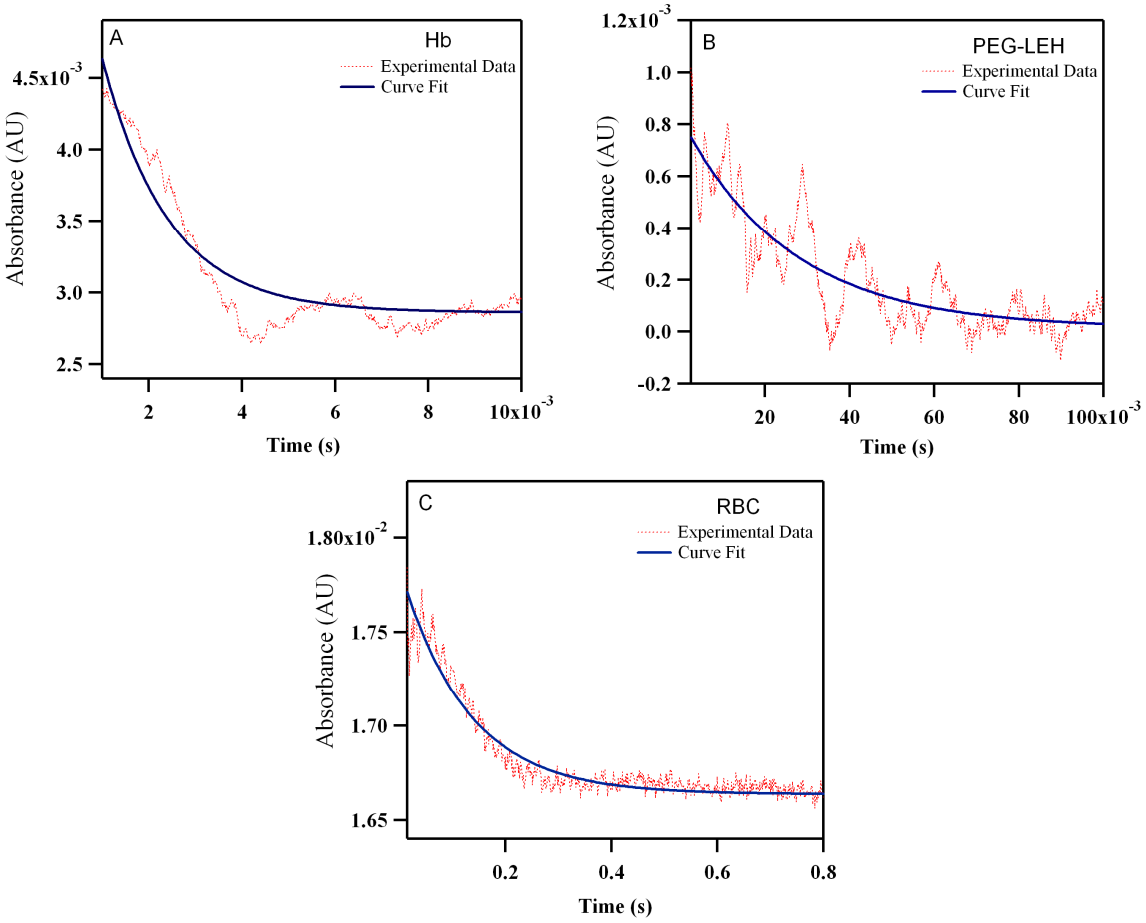

Figure S3: Time courses for NO (25 μM) induced oxidation with oxygenated bovine: (A) Hb (B) PEG-LEHs and (C) RBCs. The experimental data shows an average of 8-10 kinetic traces for Hb/PEG-LEHs and 2-3 kinetic traces for RBCs. For experiments with Hb and PEG-LEHs, both NO and Hb, solutions were made in 50 mM Tris buffer (pH 7.4). For experiments with RBCs, NO and RBC, solutions were made in PBS (pH 7.4), to avoid hypotonic shock and lysis of RBCs. The reactions were monitored at 420 nm and 25^{o}C.