

**Photolysis of Adenosylcobalamin and Radical Pair Recombination in
Ethanolamine Ammonia-Lyase Probed on the Micro- to Millisecond Time
Scale by using Time-Resolved Optical Absorbance Spectroscopy**

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SUPPORTING INFORMATION

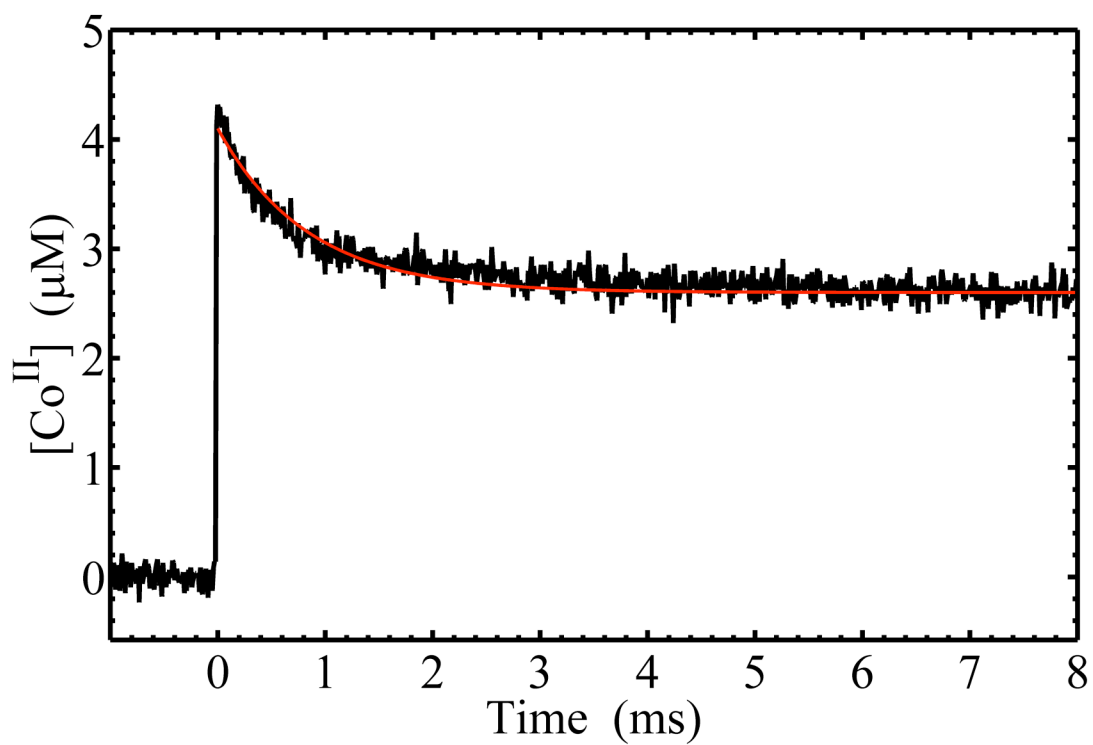


Figure S1. Time dependence of cob(II)alamin concentration following pulsed laser photolysis of AdoCbl bound to EAL, and overlaid best-fit monoexponential plus constant decay function (red). *Fitting parameters:* First-order rate constant, $1.2 \times 10^3 \text{ s}^{-1}$; normalized transient amplitude, 0.37; normalized constant amplitude, 0.63.

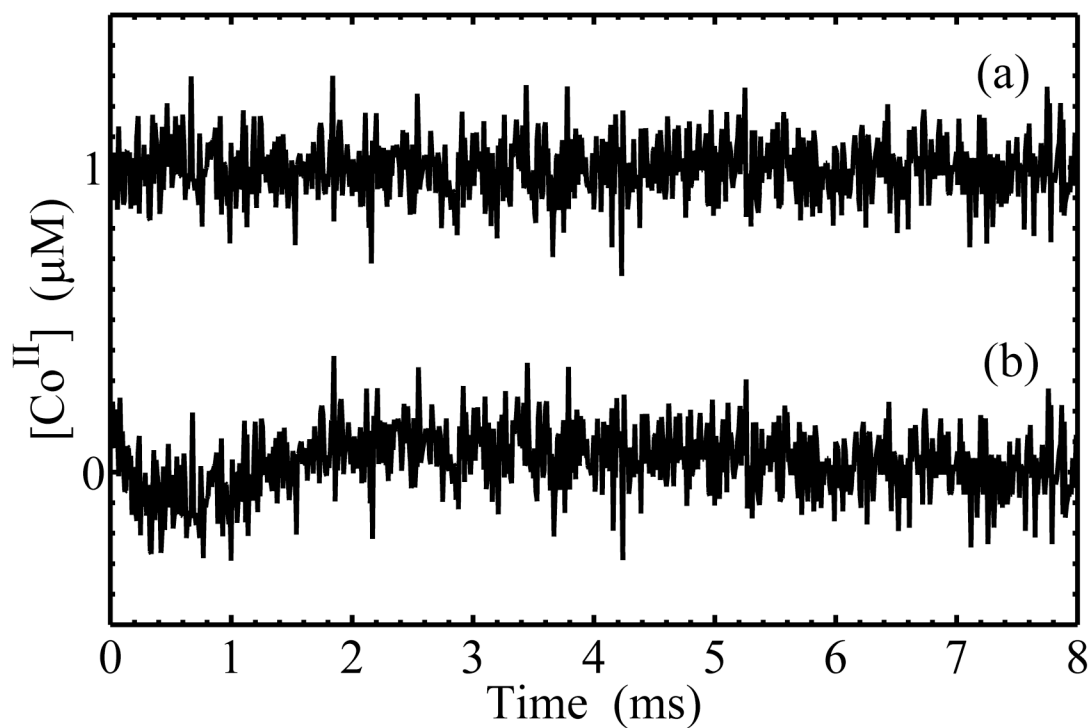


Figure S2. Residuals of fits of the time dependence of cob(II)alamin concentration following pulsed laser photolysis of AdoCbl bound to EAL. (a) Residuals of biexponential plus constant fit function. (b) Residuals of monoexponential plus constant fit function. Trace (a) has been offset from trace (b) by a constant addend of 1 μM . Figure 4b shows the biexponential plus constant fit, and Figure S1 shows the monoexponential plus constant fit.

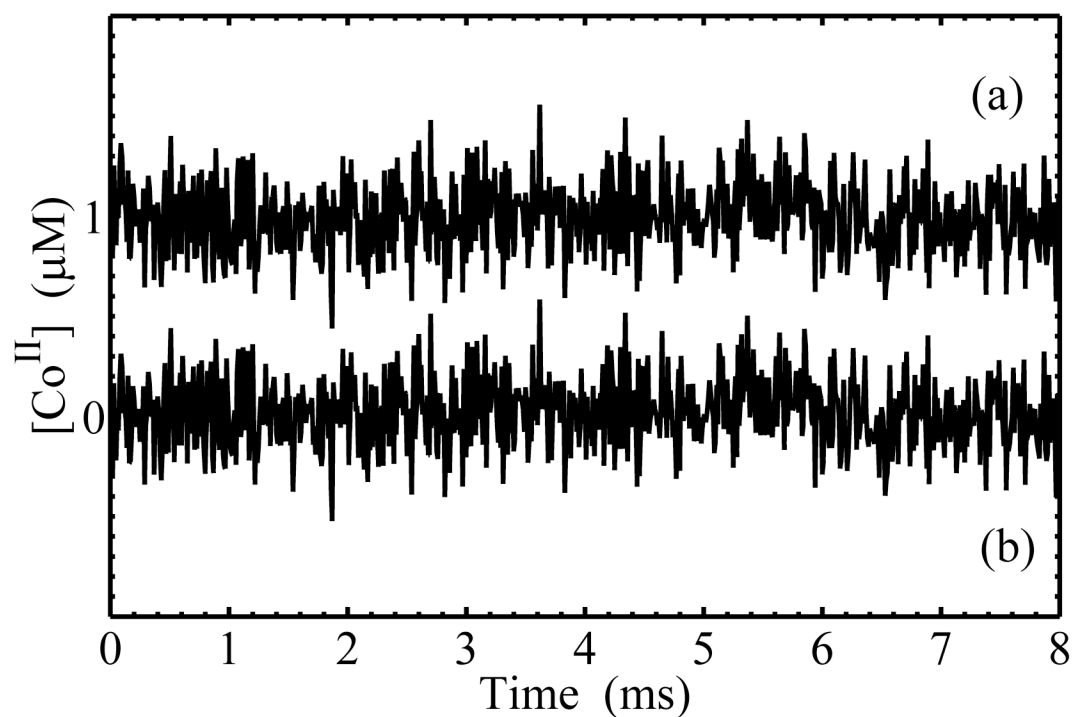


Figure S3. Residuals of fits of the time dependence of cob(II)alamin concentration following pulsed laser photolysis of AdoCbl in EAL with (*S*)-a-amino-2-propanol bound. (a) Residuals of monoexponential plus constant fit function. (b) Residuals of biexponential plus a constant fit function. Trace (a) has been offset from trace (b) by a constant addend of 1 μM . Figure 4c shows the monoexponential plus constant fit.