

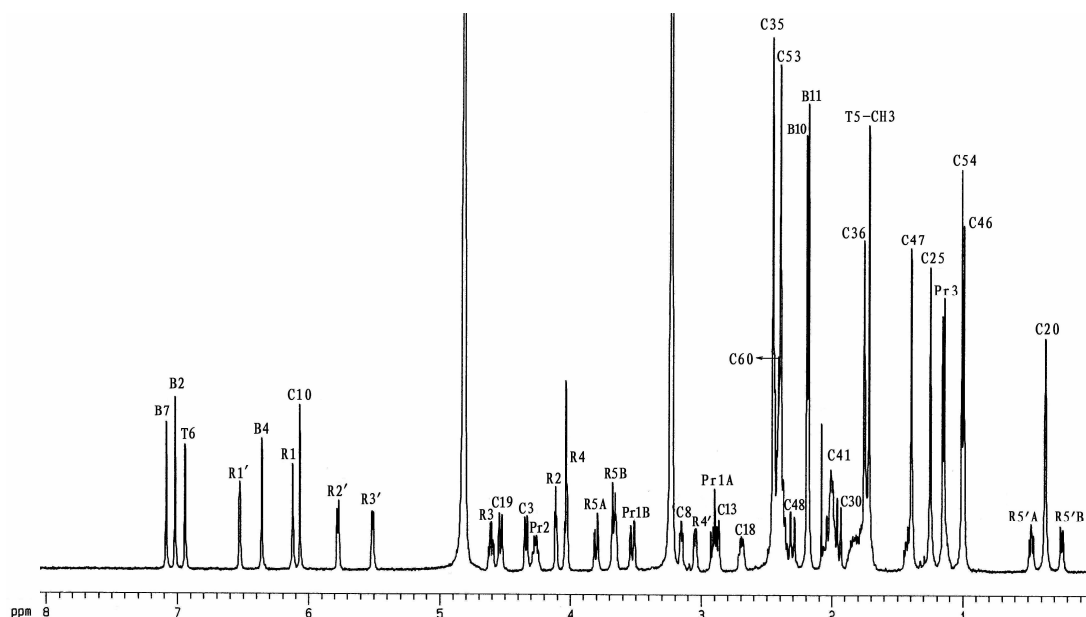


Figure S1. The 500 MHz ^1H NMR spectra of 2',3'-anThyCbl in CD_3OD at 25°C (TSP as internal)

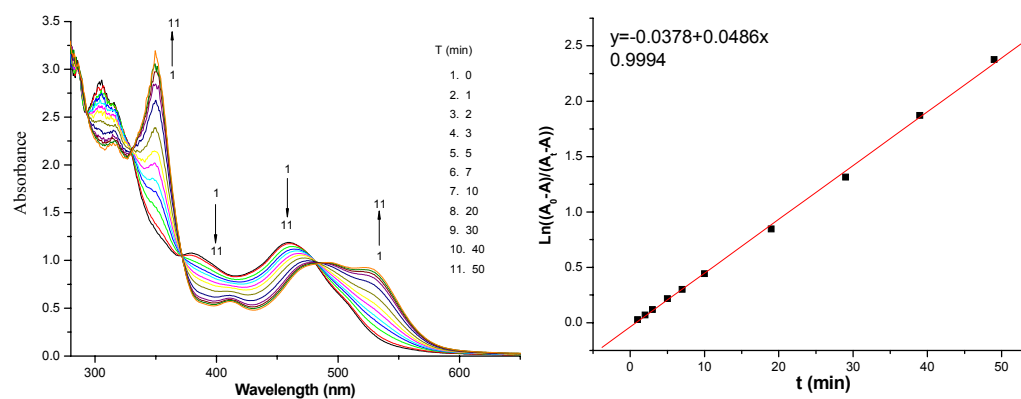


Figure S2. Change of UV-Vis spectra for aerobic photolysis of AdoCbl in pH1.0 at 15°C , $T_{1/2} = 14.36$ min.

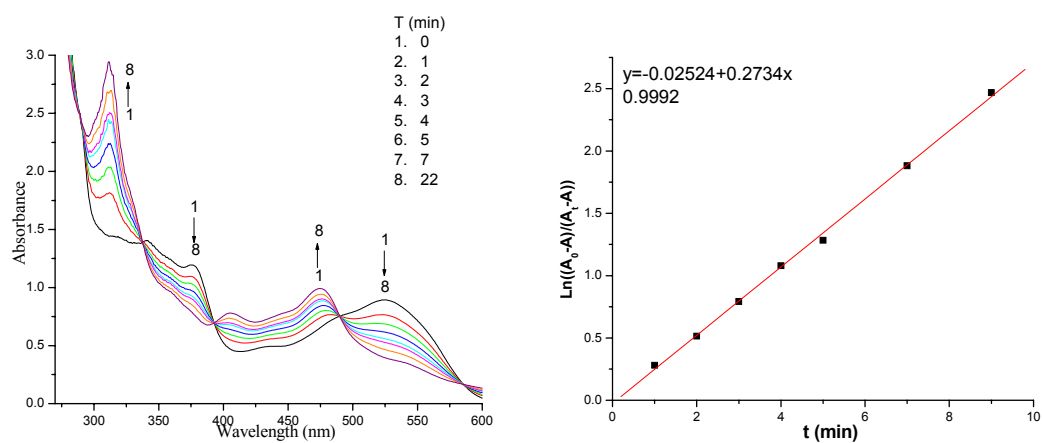


Figure S3. Changes of UV-Vis spectra for anaerobic photolysis of AdoCbl at pH 6.86 with TEMPO at 25 °C, $T_{1/2} = 2.62$ min.