“Resonance Raman Detection of the Hydroperoxo Intermediate in the Cytochrome P450 Enzymatic Cycle”

Piotr J. Mak, Ilia G. Denisov, Doreen Victoria, Thomas M. Makris, Tianjing Deng, Stephen G. Sligar* and James R. Kincaid*

Contribution from the Department of Chemistry, Marquette University, Milwaukee, Wisconsin 53233 and Department of Biochemistry, Center for Biophysics and Computational Biology, and the Beckman Institute, University of Illinois, Urbana-Champaign, Illinois 61801

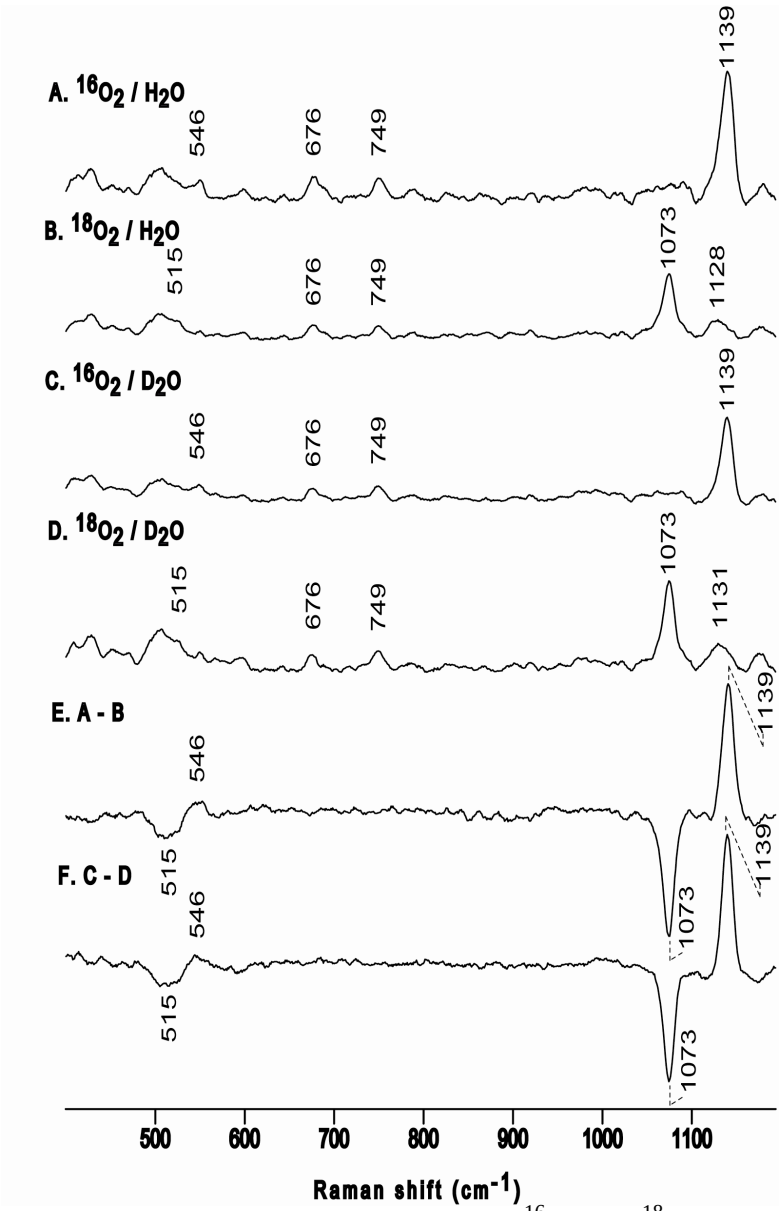

Figure S1: Resonance Raman spectra of $^{16}O_2$ and $^{18}O_2$ adducts of P450cam in H_2O and ^2H_2O buffer, before irradiation (30 % glycerol, 413 nm excitation line, 77 K).

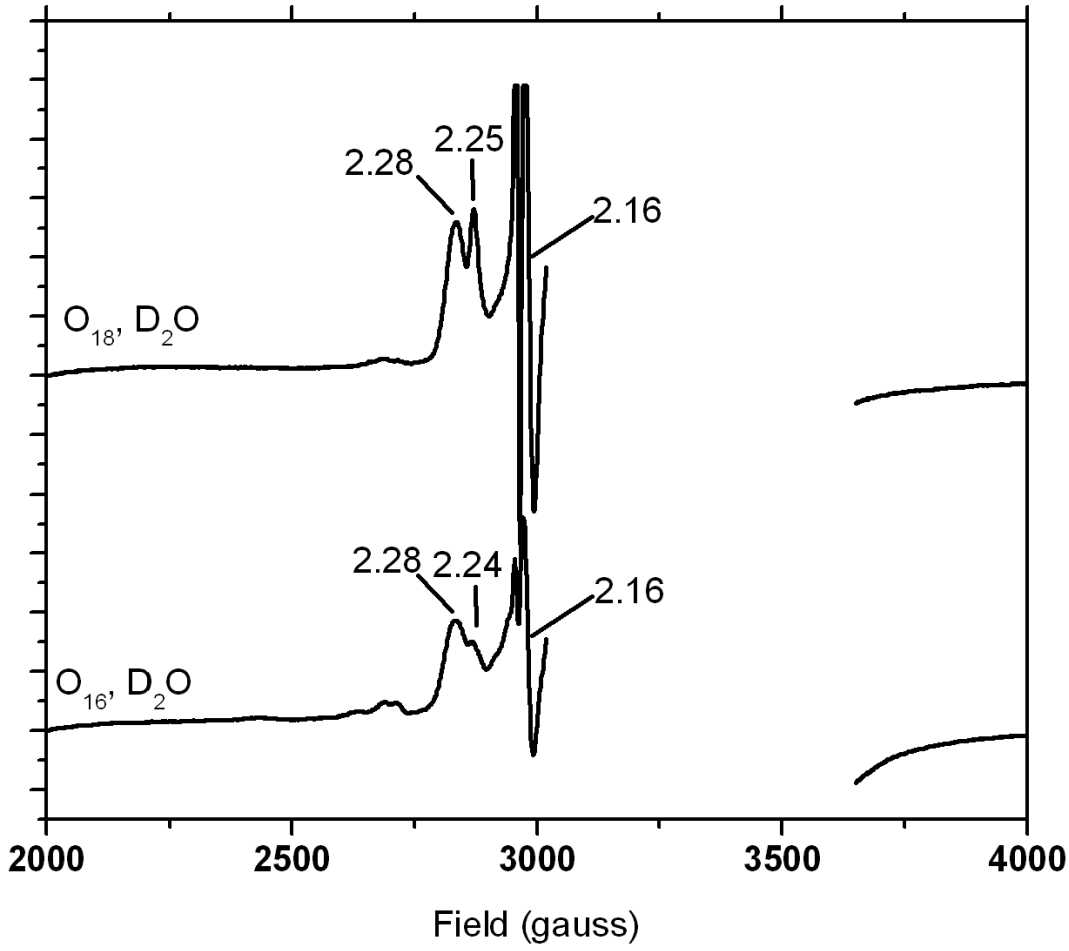

Figure S2: EPR spectra of irradiated oxyCYP101.

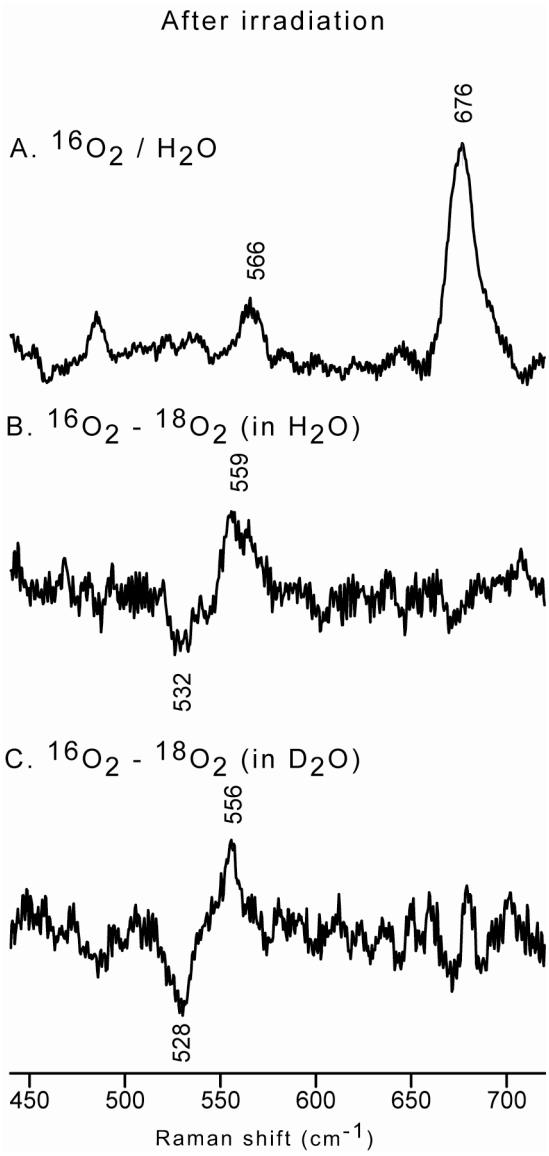

Figure S3: Low Frequency RR spectrum of $^{16}O_2$ CYP101 in 30% glycerol/buffer after irradiation (A); $^{16}O_2$-$^{18}O_2$ in glycerol /buffer (B); $^{16}O_2$-$^{18}O_2$ in deuterated glycerol/buffer (C).