

Supplemental Table 1. Apparent First Order Rate Constants for Inactivation of CES2 by Increasing Concentrations of Paraoxon

Paraoxon (nM)	k_{obs} (s^{-1})	k_{obs} (corrected) (s^{-1})*
0	2.99×10^{-4}	0
200	1.73×10^{-3}	1.43×10^{-3}
400	2.05×10^{-3}	1.75×10^{-3}
600	2.99×10^{-3}	2.69×10^{-3}
800	3.85×10^{-3}	3.55×10^{-3}
1000	5.06×10^{-3}	4.76×10^{-3}
1500	7.48×10^{-3}	7.18×10^{-3}
2000	8.92×10^{-3}	8.62×10^{-3}

* k_{obs} (corrected) was calculated by subtracting the k_{obs} value determined when paraoxon was 0 nM from the k_{obs} value determined at each concentration of paraoxon.

Figure Legends

Supplemental Figure 1. Determination of the bimolecular rate constant for CES2 and

paraoxon. The corrected observed rate constant $k_{\text{obs}}(\text{corr})$ was plotted versus paraoxon concentration and the slope of the line (k_{inact}/K_I') was determined. k_{inact}/K_I' is the apparent bimolecular rate constant k_i' . The true bimolecular rate constant k_i was calculated as described in the Materials and Methods section.

Supplemental Figure 1

