Electronic Supplementary Material (ESI) for Faraday Discussions.

Supplementary Information

Exploring Hitherto Uninvestigated Reactions of the Fatty Acid Peroxygenase CYP152A1: Catalase Reaction and Compound I Formation

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Supplemental Figures

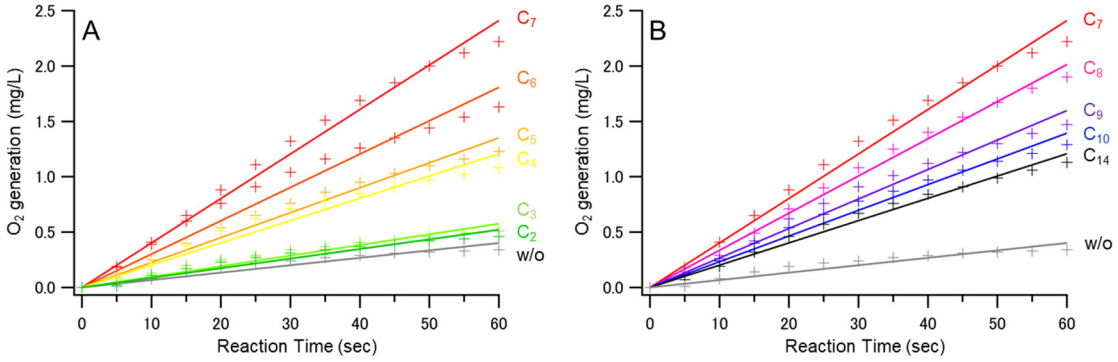

Figure S1. Time course of O_2 generation under 4 mM Hydrogen Peroxide with CYP152A1 in the presence (colored) or absence (gray) of n-short-chain fatty acids (A) and n-medium/long chain fatty acids (B). The final concentrations of fatty acid were 20 mM for short-chain fatty acid such as Acetic acid (C_2), Propionic acid (C_3), Butanoic acid (C_4), Pentanoic acid (C_5), Hexanoic acid (C_6), and Hexanoic acid(C_7), 10 mM for medium-chain fatty acid such as Octanoic acid (C_8) and Nonanoic acid (C_9), 5 mM for Decanoic acid (C_{10}), and 50 μM for Myristic acid (C_{14}).

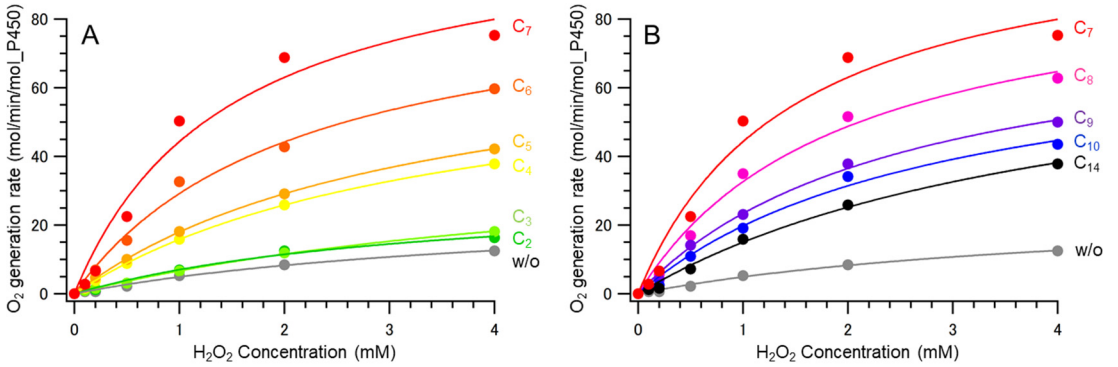

Figure S2. Michaelis–Menten kinetics carve of CYP152's catalase reaction rate in the presence (colored) or absence (gray) of n-short-chain fatty acids (A) and n-medium/long chain fatty acids (B).