

## Supporting Information

Measurements of Kinetics and Equilibria for the Multiphase Reactions of Hydroperoxides with Carbonyls to Form Peroxyhemiacetals

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Content: 1 page and 2 figures. Comparison of ESI-ToF-MS spectra for HPN probe and PHA decomposition (Figure S1). Hydroperoxide structures from Antonovskii and Terent'ev<sup>1</sup> (Figure S2).

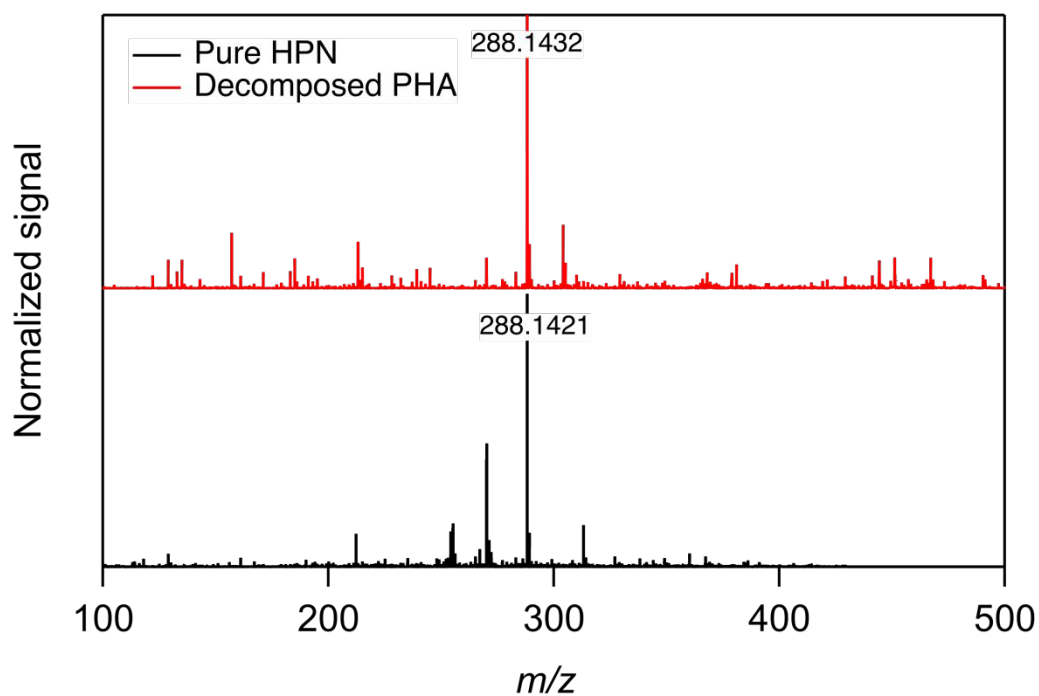


Figure S1. Normalized ESI-ToF-MS mass spectra of pure HPN and decomposed PHA following fractionation by HPLC. The components have the same HPLC retention times in chromatograms measured at 210 nm. The major peak in each spectrum corresponds to the  $\text{Na}^+$  adduct of HPN.

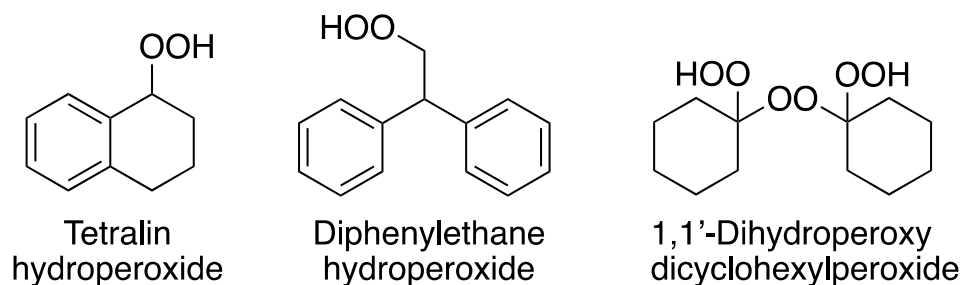


Figure S2. Structures of hydroperoxides used in a study of the kinetics of the formation of PHA by Terent'ev et al.<sup>1</sup> that are most similar to the hydroperoxide used here.

## REFERENCES

(1) Antonovskii, V. L.; Terent'ev, V. A. Effect of the Structure of Hydroperoxides and some Aldehydes on the Kinetics of the Noncatalytic Formation of  $\alpha$ -Hydroxy Peroxides. *Zh. Org. Khim.* **1967**, 3, 1011–1015.