

Supplementary Materials: Oligomerization and Nitration of the Grass Pollen Allergen Phl p 5 by Ozone, Nitrogen Dioxide, and Peroxynitrite: Reaction Products, Kinetics, and Health Effects

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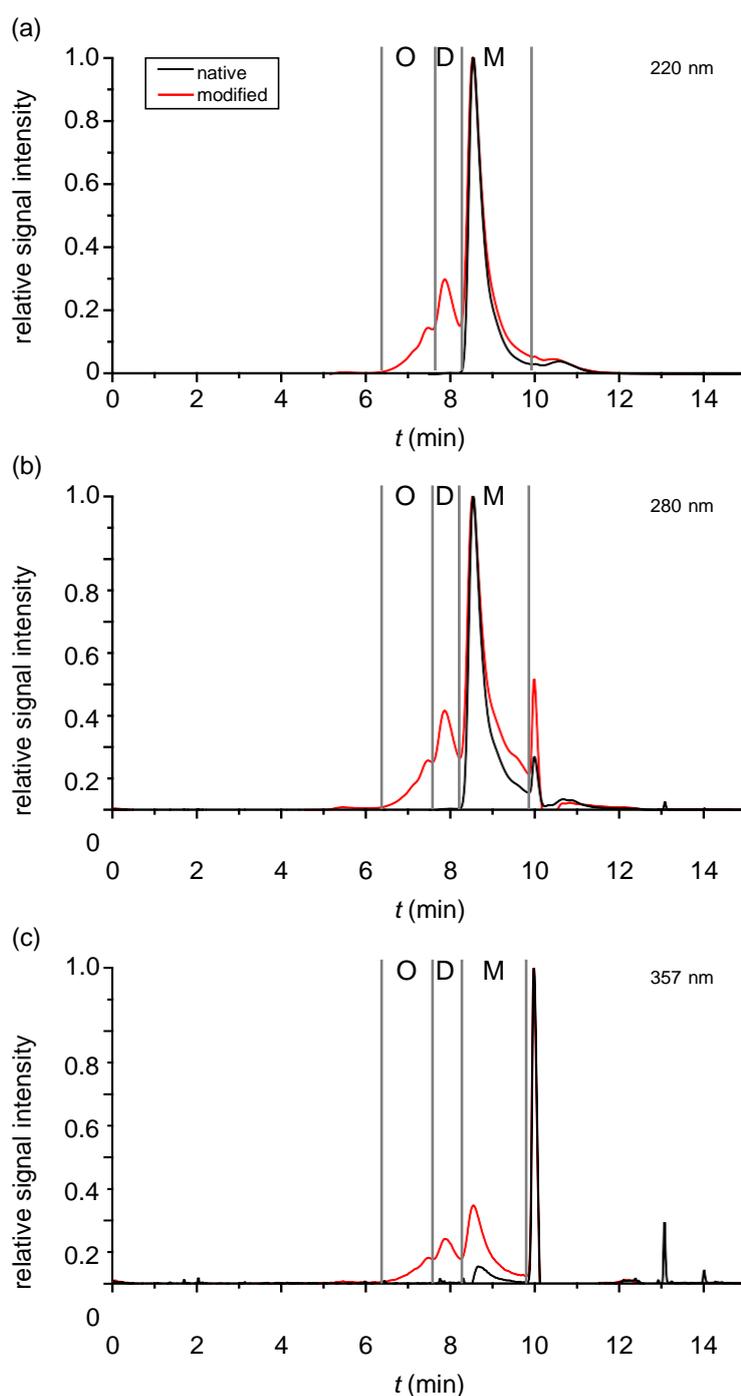
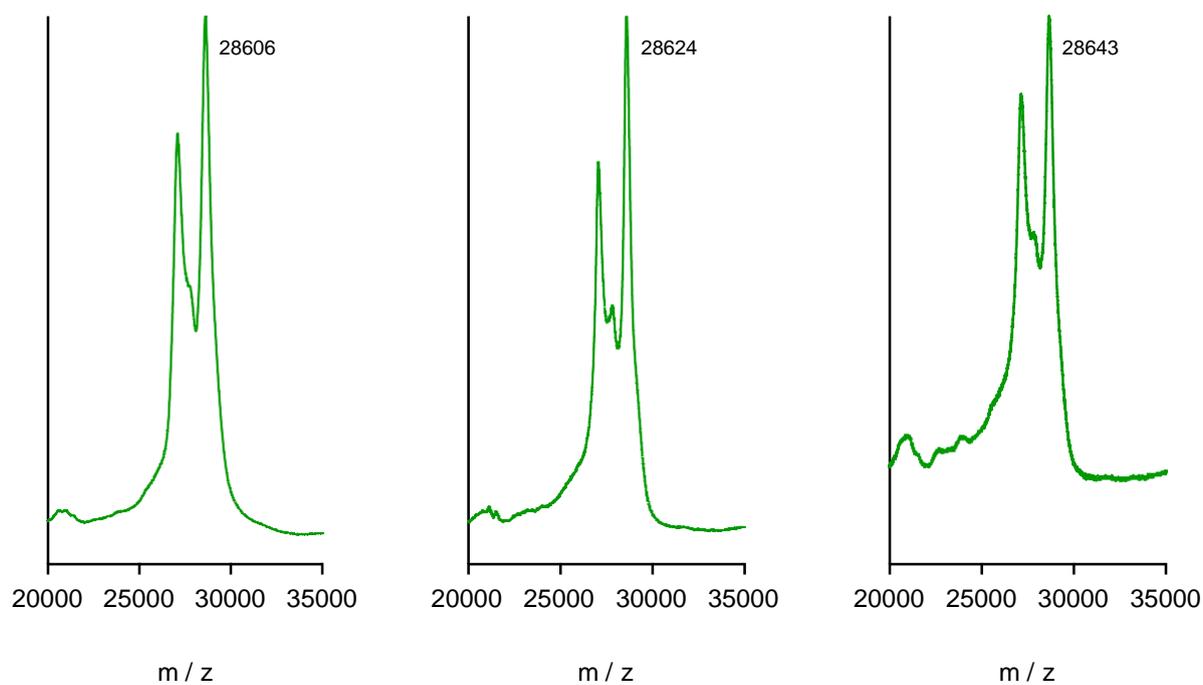


Figure S1. Exemplary chromatograms from the SEC-DAD analysis of Phl p 5 before (black) and after (red) exposure to O₃ and NO₂ measured at different wavelength: (a) 220 nm, (b) 280 nm, (c) 357 nm. Dashed grey lines separate monomer (M), dimer (D), and higher oligomer (O) fractions.

(a) O_3/NO_2 (50/50 ppb), 10 h (b) O_3/NO_2 (200/200 ppb), 2 h (c) O_3/NO_2 (200/200 ppb), 10 h



(d) $ONOO^-/Tyr$ (1/1) (e) $ONOO^-/Tyr$ (3/1) (f) $ONOO^-/Tyr$ (5/1)

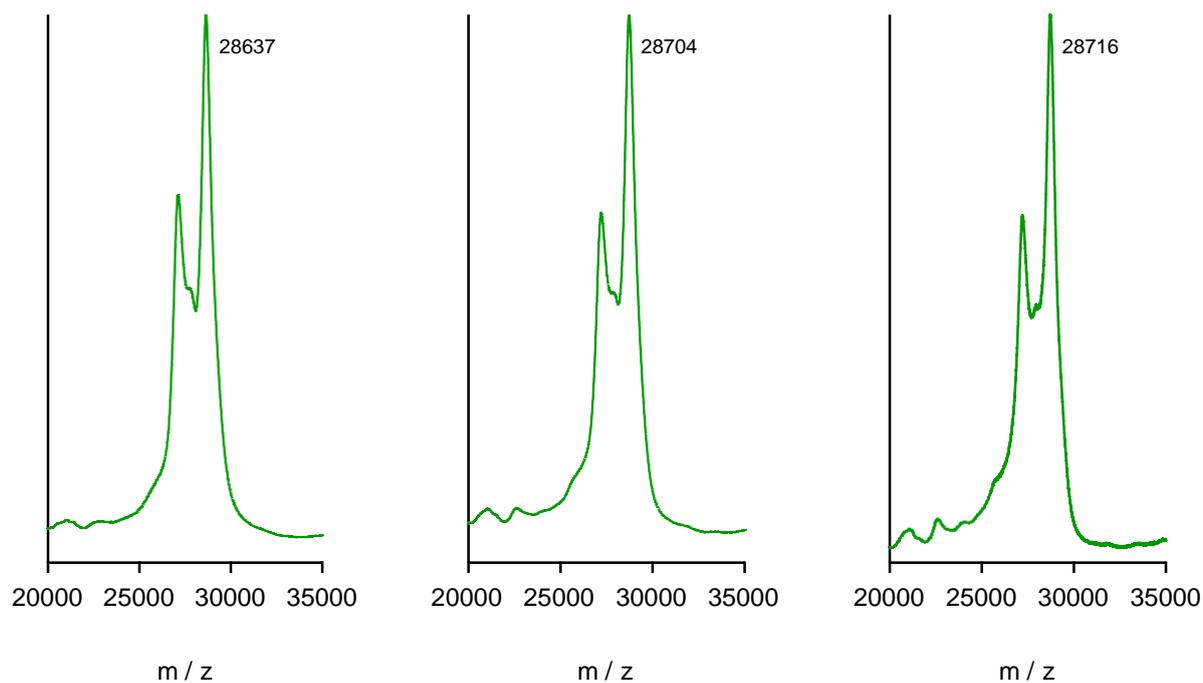


Figure S2. MALDI spectra of selected samples.

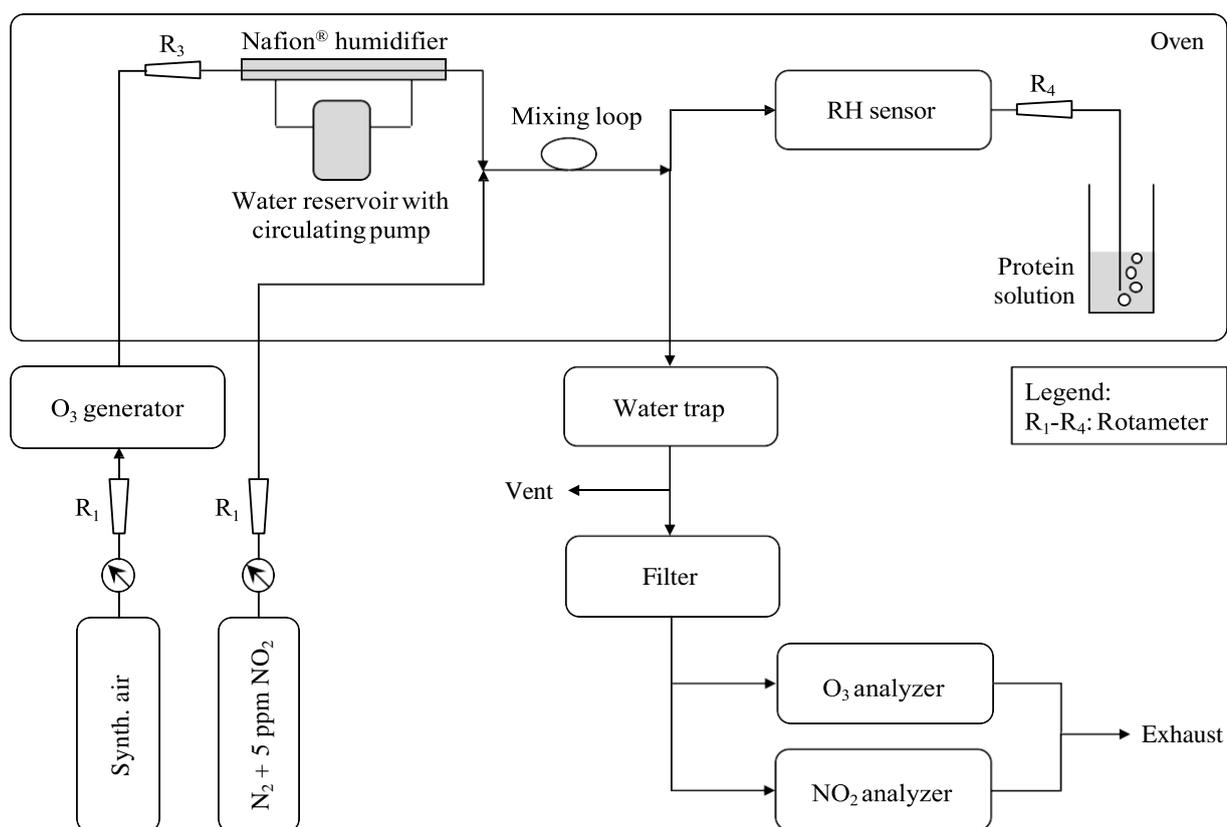


Figure S3. Experimental setup used for the exposure of Ph1 p5 to O_3 and NO_2 .