

Supplementary Information for:

Ozone oxidizes glutathione to a sulfonic acid

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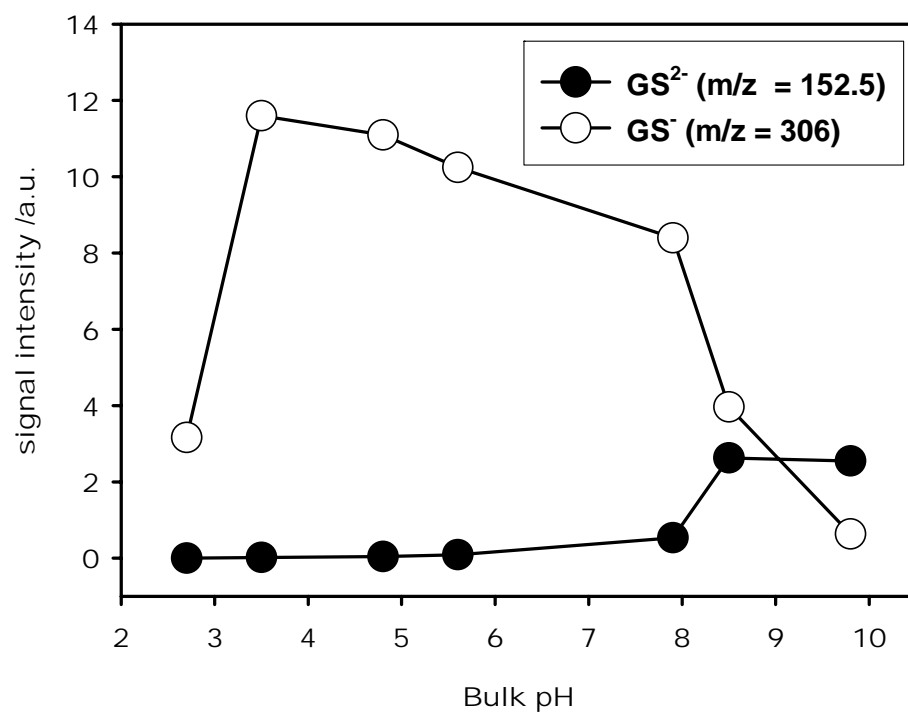
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Supplementary Table S1. Best-fit parameters* for the data of Fig. 4A lower panel.

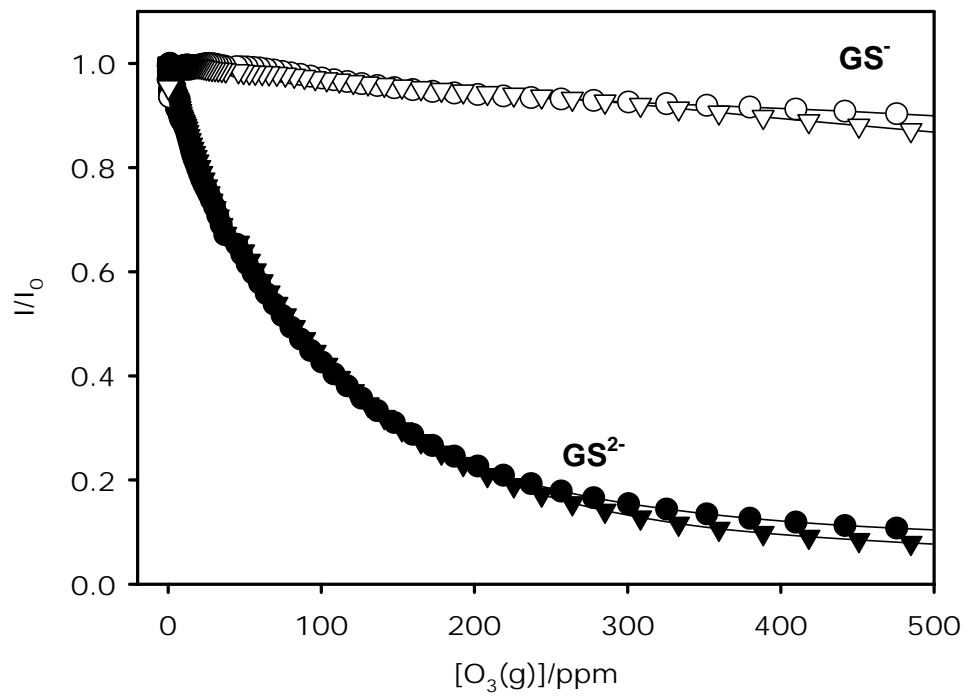
pH	<i>a</i>	<i>b</i>	<i>c</i>	<i>R</i> **	γ
3.5	-4.73 ± 0.31	0.00 ± 0.00	-0.002	0.9648	-0.002
4.7	0.45 ± 0.15	0.00 ± 0.02	-0.004	0.8427	-0.004
7.3	0.13 ± 0.01	0.10 ± 0.02	-0.002	0.9157	-0.015
9.2	0.18 ± 0.00	0.61 ± 0.02	-0.006	0.9902	-0.116

* Using $y = y_0 + a\exp(-bx) + cx$; $y = [\text{I}]/[\text{I}]_0$; $x = [\text{O}_3(\text{g})]$, see reference 1 for details.

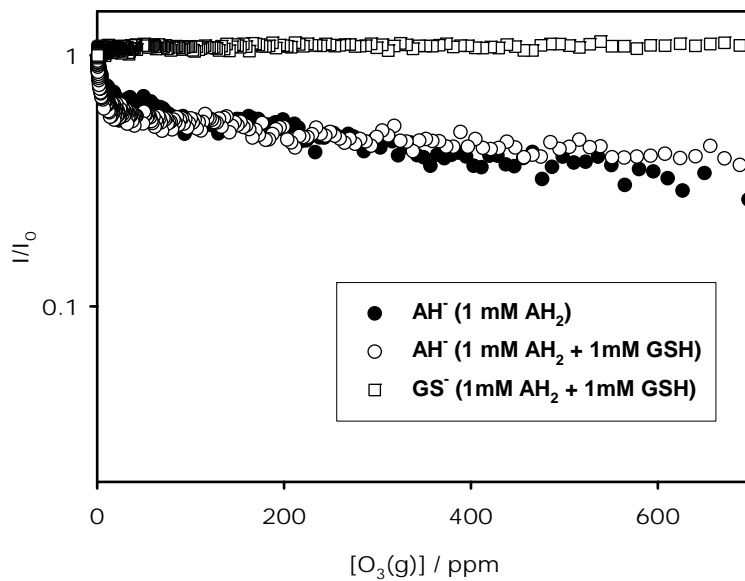
** Correlation coefficient



Supplementary Figure S1 pH dependence on mono- and di-anion signal intensities of 0.5 mM GSH.



Supplementary Figure S2 Plot of reactants GS^- and GS^{2-} signals vs. $[\text{O}_3(\text{g})]$ at 1.0 mM GSH with (circle) / without (triangle) excess 1.1 M *tert*-butanol



Supplementary Figure S3 AH^- profiles toward $O_3(g)$ in 1.0 mM AH_2 at bulk pH = 3.5 (closed circle) and AH^- and GS^- profiles in the mixture of 1.0 mM AH_2 + 1.0 mM GSH at bulk pH = 3.5 (open circle and open square, respectively).

Reference

1. Enami, S., Hoffmann, M.R. & Colussi, A.J. Acidity enhances the formation of a persistent ozonide at aqueous ascorbate/ozone gas interfaces. *Proc. Natl. Acad. Sci. U.S.A.* **105**, 7365-7369 (2008).