

## Supplemental Information

### **Chemical Penetration Enhancers Increase Hydrogen Peroxide Uptake by *C. elegans* in *In Vivo* Fast Photochemical Oxidation of Proteins**

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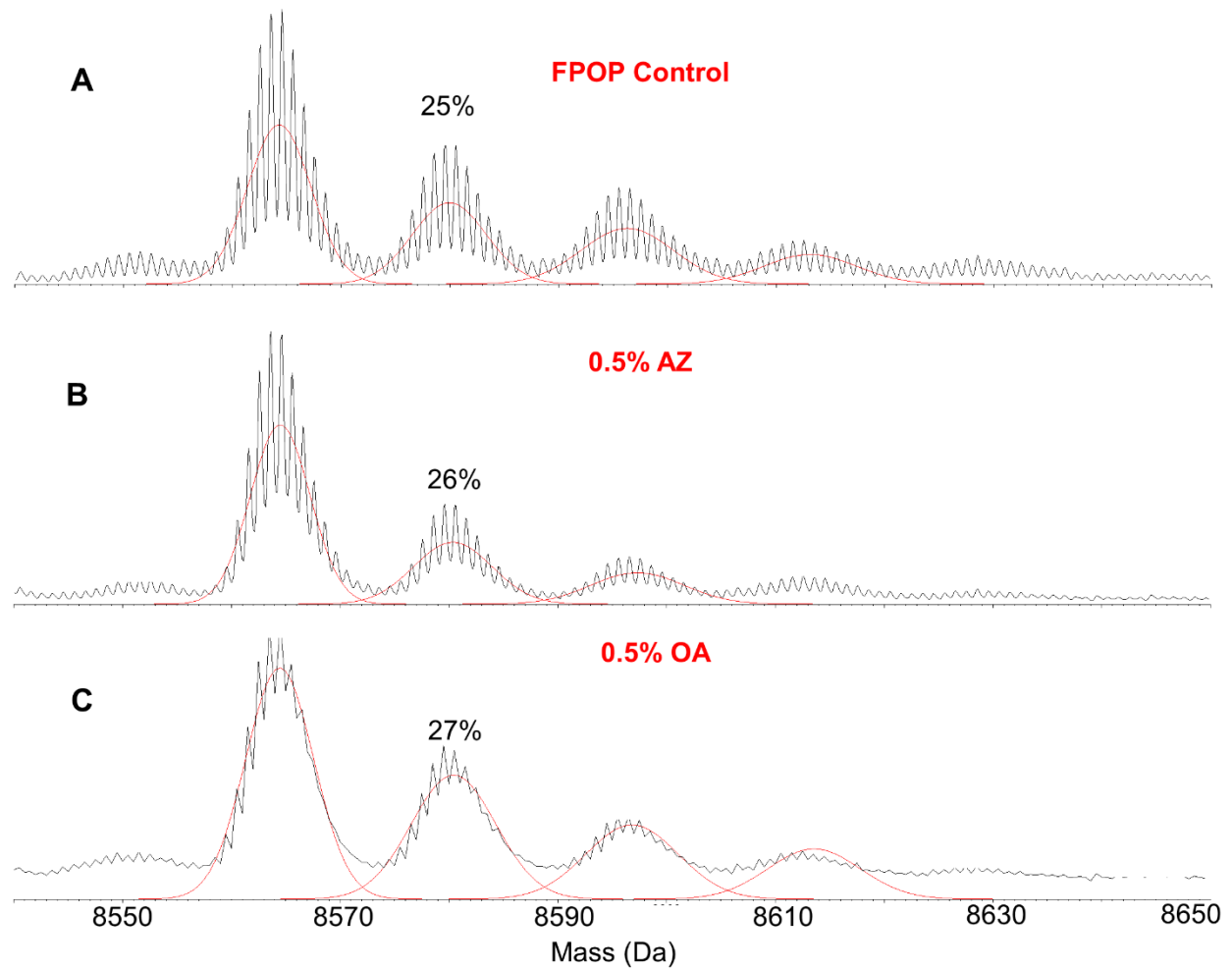
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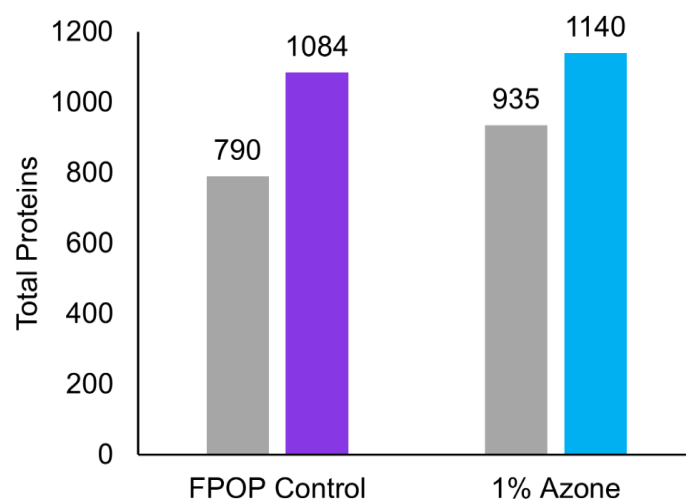
**Table S3.** IV-FPOP oxidatively modified proteins using 200 mM hydrogen peroxide plus 2CPEs..... (.xlsx)

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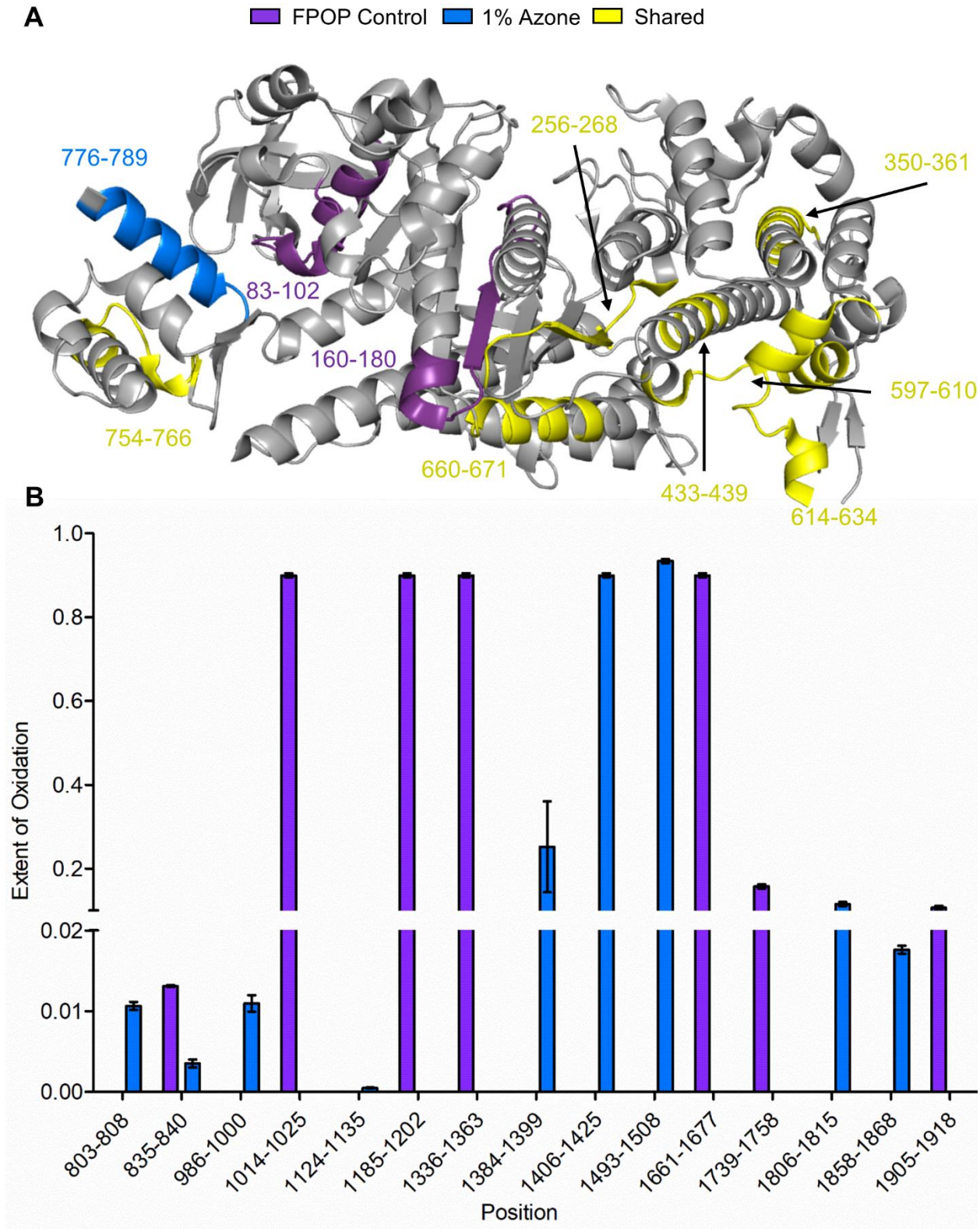
## Supplemental Figures



**Figure S1.** Ubiquitin intact mass analysis. (A) Control in vitro FPOP ubiquitin (0% CPE). (B) in vitro FPOP ubiquitin in the presence of 0.5% AZ. (C) in vitro FPOP ubiquitin in the presence of 0.5% OA.



**Figure S2.** Background oxidation. Oxidatively modified proteins in the absence (purple) and presence (blue) of 1% AZ. Grey bars represent the total background oxidation in each condition.



**Figure S3.** *C. elegans* myosin extent of oxidation. (A) N-terminal end oxidatively modified peptides of myosin (PDB: 6QDJ): two modified peptides in the IV-FPOP control group (purple),

one modified peptide in the 1% AZ group (blue), and seven overlapping modified peptides (yellow). (B) C-terminal end oxidatively modified peptides within myosin from the IV-FPOP control group (purple) against 1% AZ group (blue).