

**Fig S1. Mass spectrometry analysis of proMMP-7 demonstrates thiol-alkylation of the cysteine switch domain.** Recombinant proMMP-7 (10  $\mu$ M) was incubated with OA-NO<sub>2</sub> in 50 mM sodium phosphate, 100  $\mu$ M DTPA, pH 7.4 for 30 min at 37 °C. ProMMP-7 was digested with sequencing grade-modified trypsin for 3 or 16h at 37°C. **A**, LC-ESI-MS/MS spectrum of the nitroalkylated cysteine switch domain peptide. **B**, MS-MS fragment ions of OA-NO<sub>2</sub> modified cysteine peptide. Detected ions are highlighted in bold. **C**, Fragmentation of the MMP-7 modified thiol (S-OA-NO<sub>2</sub>) peptide. These results are representative of three independent experiments.

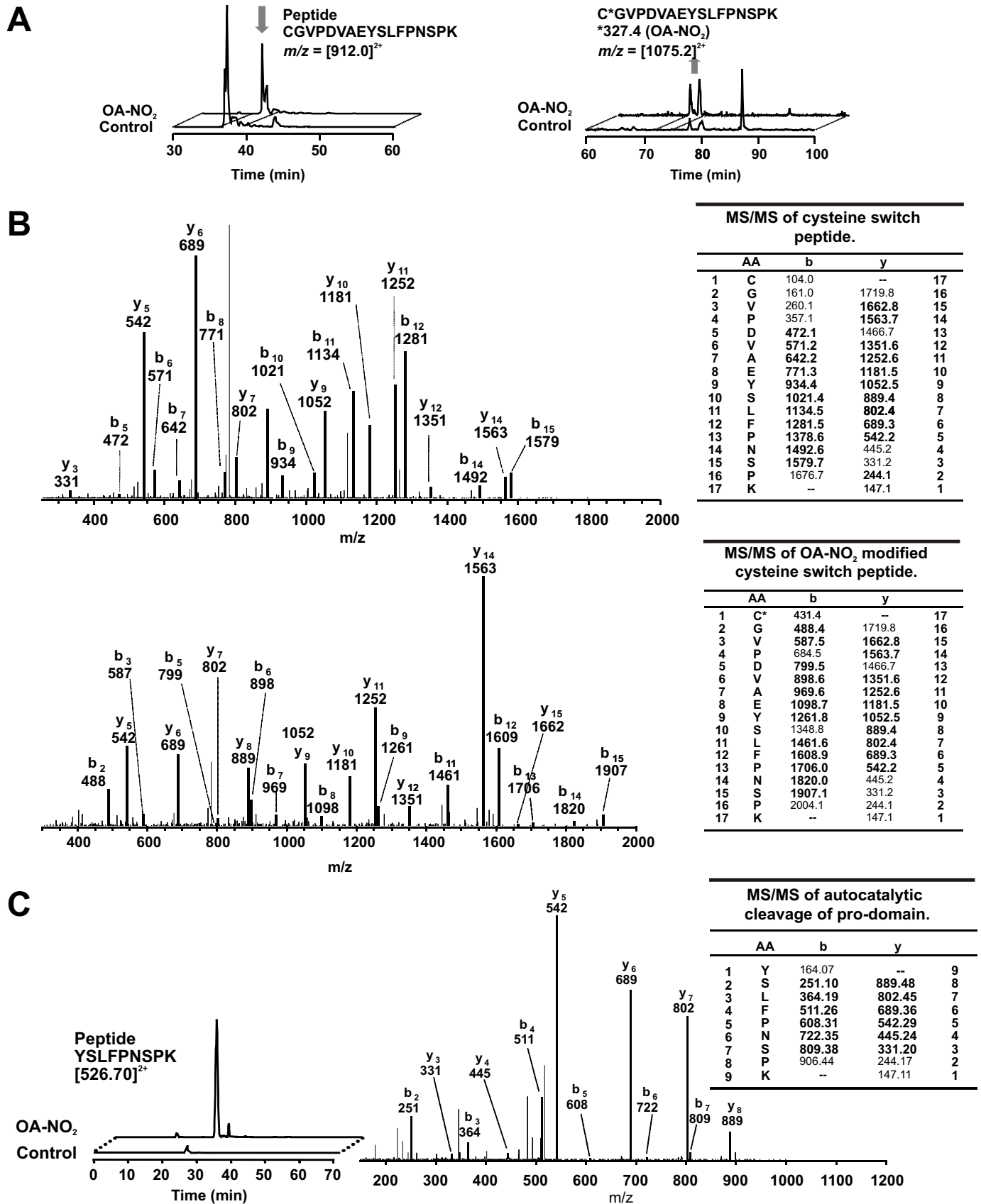


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