



Fig. S1 (ESI) Comparison of the measured 8+ charge state of lysozyme (A) with the calculated spectra of lysozyme having 5 iodine labels (B) and the respective oxidation product (C).

Table S1 (ESI) Instrumental parameters for the ICP-MS System

ICP System	
ELEMENT 2 (Thermo Fisher Scientific, Bremen, Germany) conditions used for laser ablation	
Incident power	1025 W
Cooling gas flow rate	16 L min ⁻¹
Auxiliary gas flow rate	1.3 L min ⁻¹
Make-up gas flow rate	1 L min ⁻¹
Resolution setting	400 (4000)
Isotopes monitored	¹²⁷ I ⁺ (¹³ C ⁺)
ELEMENT 2 (Thermo Fisher Scientific, Bremen, Germany) conditions used for Aridus nebuliser	
Incident power	1025 W
Cooling gas flow rate	16 L min ⁻¹
Auxiliary gas flow rate	1.3 L min ⁻¹
Resolution setting	400
Isotopes monitored	¹²⁷ I ⁺
Working conditions of the laser ablation system	
Laser energy	3 mJ
Make-up gas flow rate, Ar	1 L min ⁻¹
Carrier gas flow rate, He	1.6 L min ⁻¹
Repetition rate	15 shots per second, Hz
Translation velocity	1 mm s ⁻¹
Distance between line scans	1 mm