ESI

Iodination of proteins, proteomes and antibodies with potassium triodide for LA-ICP-MS based proteomic analyses

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Table S1: Instrumental parameters and operational conditions of the ICP-MS.

ELEMENT 2 (Thermo Fisher Scientific, Bremen, Germany) conditions used for laser ablation	
Incident power	1,025 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
Isotopes monitored	$^{127}I^+$, $^{165}Ho^+$, $^{159}Tb^+$
Make-up gas flow rate, Ar	1 L min^{-1}
Carrier gas flow rate, He	1.6 L min^{-1}
Repetition rate	10 shots per second, Hz
Translation velocity	0.8 mm s^{-1}
Distance between line scans	1.0 mm

Table S2: Details of the E-scan mode.

Isotope	^{127}I	^{165}Ho
Accurate mass	126.9039	164.9298
Mass window	60	60
Mass range	126.777 – 127.031	164.765 – 165.095
Magnet mass	126.904	164.930
Settling time	0.020	0.020
Sample time	0.0070	0.0070
Samples per peak	10	10
Segment duration	0.042	0.042
Search window	90	90
Integration window	80	80
Runs: 600	Passes: 1	
Total time (per pass and res.) [h:min:sec] 00:01:15		

E-scan. Method for measuring two isotopes simultaneously. Scanning distance: 60 mm; laser frequency: 10 Hz; Translation velocity: 0.8 mm s^{-1}.

Figure S1

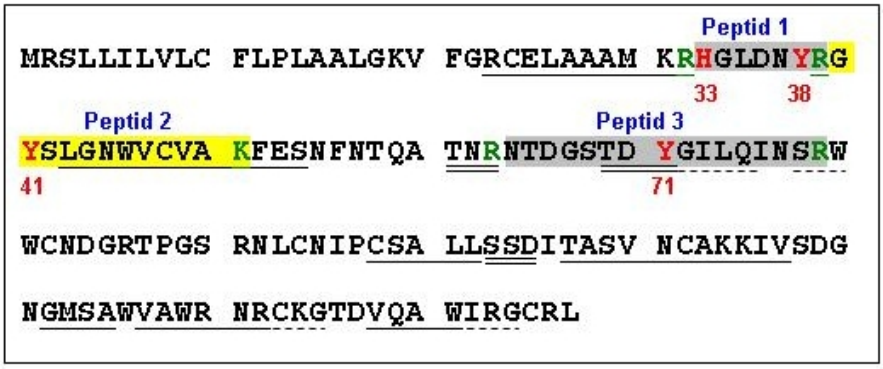

Figure 1. Amino acid sequence of egg white lysozyme (accession number: P00698). The histidine (H) and tyrosine (Y) containing tryptic fragments are highlighted by grey and yellow background colours. Green letters: amino acid positions, R and K, which are subject to trypsin-mediated cleavage and relevant for the peptides analyzed. Red letters: histidine (H) and tyrosine (Y) residues as potential sites for iodination. Underlining marks different structural features: solid line, helix; double solid line, beta strand; dotted line: turn.