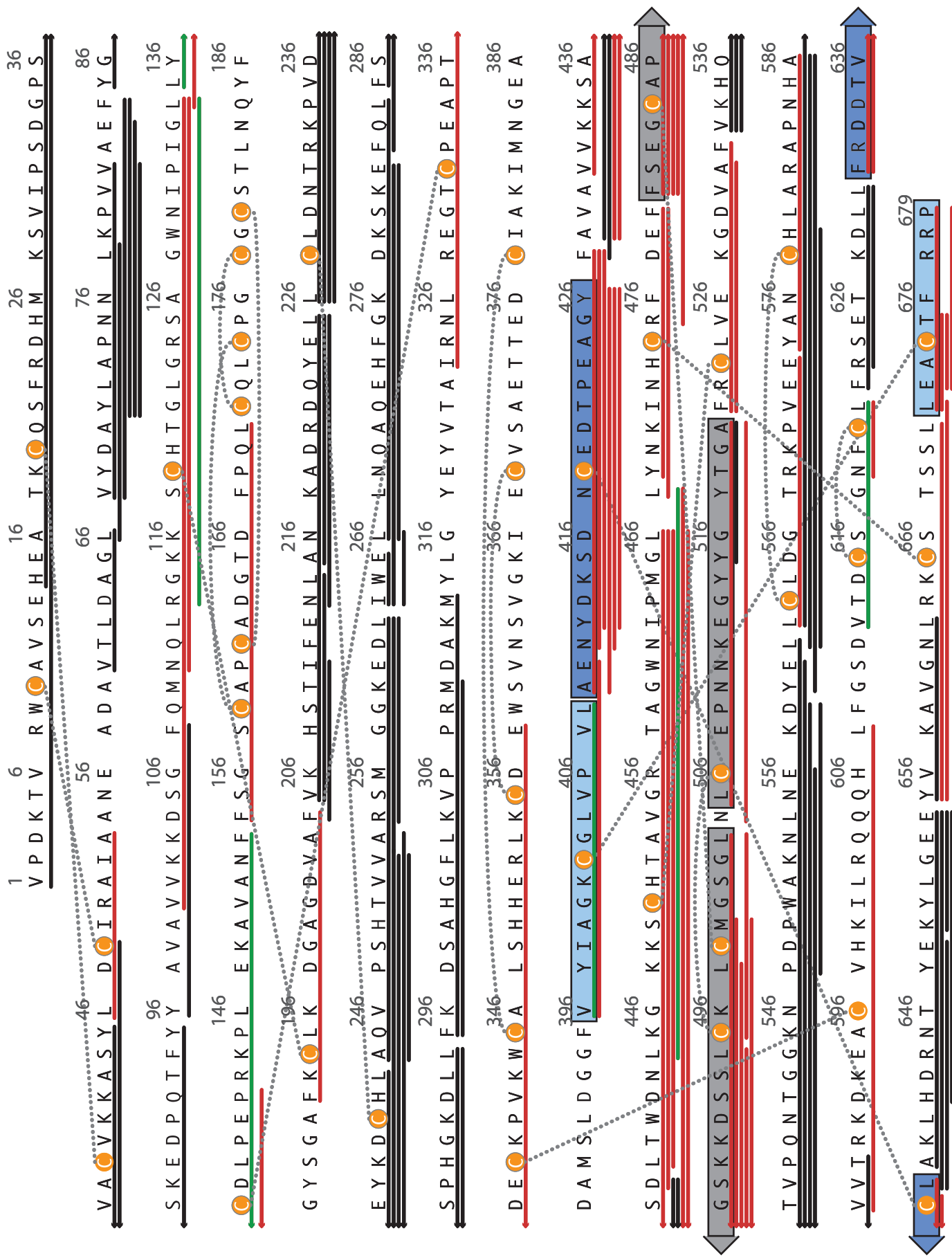


Enhancing the quality of H/D exchange measurements with mass spectrometry detection in disulfide-rich proteins using electron capture dissociation

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Red - Cys containing peptic peptide

Green - Cys detected in reduced form with HDX quench with TCEP

Figure S1. Pepsin peptide map for human serum transferrin (Tf) generated after extensive reduction of the disulfide bridges. Peptides that are colored in red contain a Cys residue (previously disulfide bound), the peptides colored in green can be detected when disulfide reduction is performed during the HDX quench step prior to digestion. The disulfide linked dimers discussed in the main text and this supplementary information are highlighted by boxes.

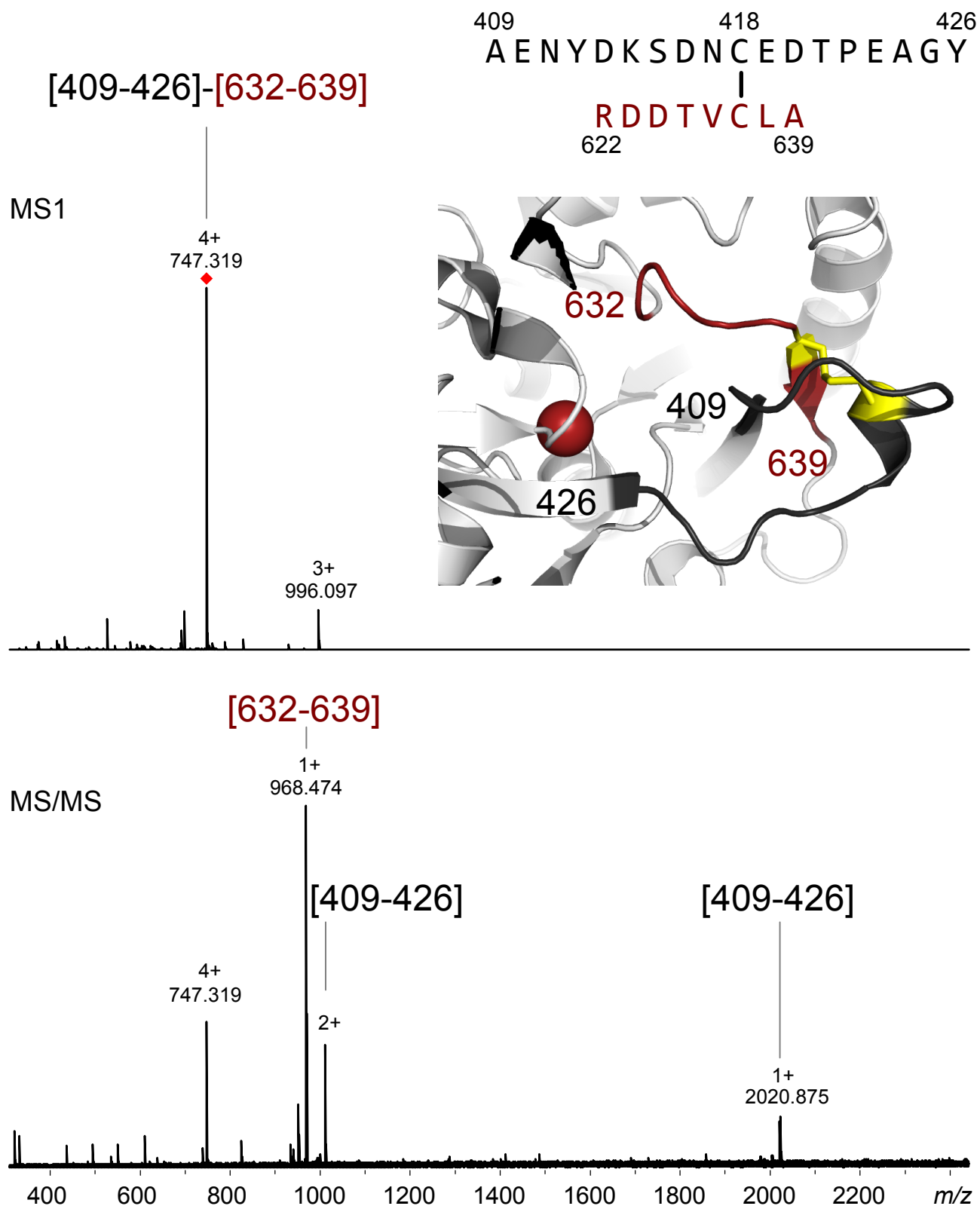


Figure S2. MS1 (top panel) and MS/MS (ECD) of the indicated precursor (lower panel) spectra acquired for disulfide linked peptide [409-426]-[632-639]. Sequence of the peptide indicates the position of the disulfide bond, the image inset at top highlights the location of this disulfide in a solved crystal structure for Tf (PDB ID: 2HAV).

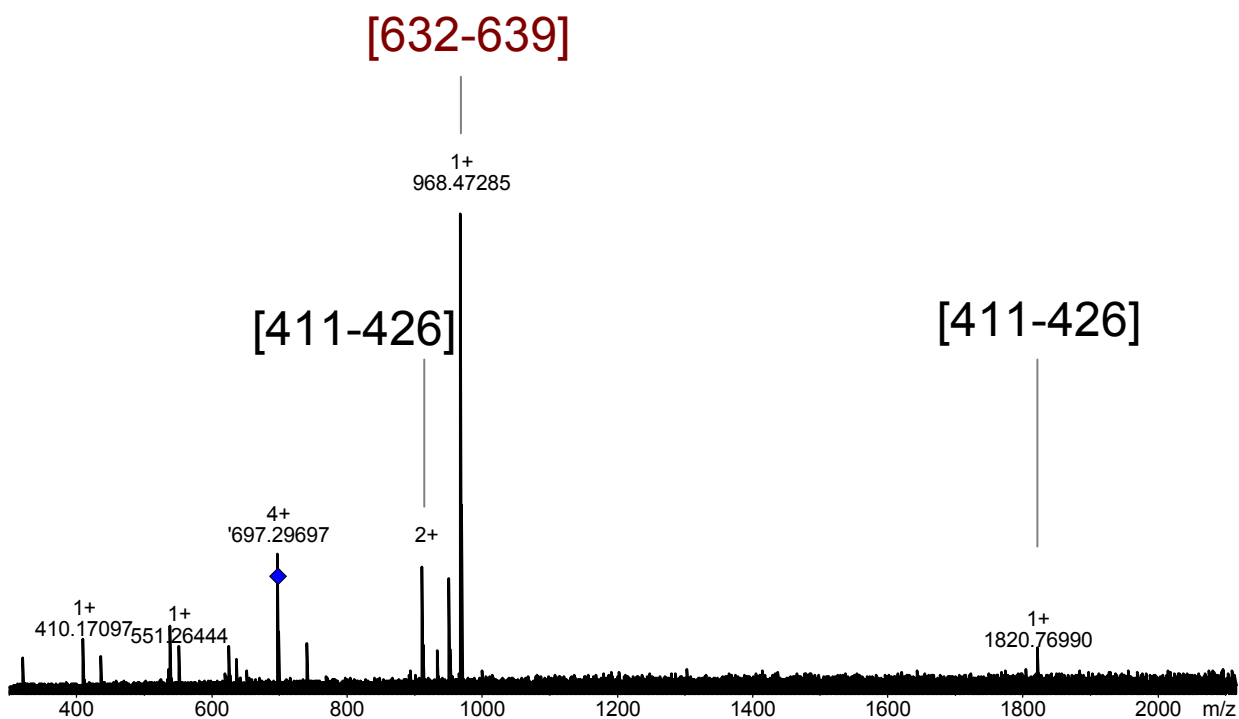
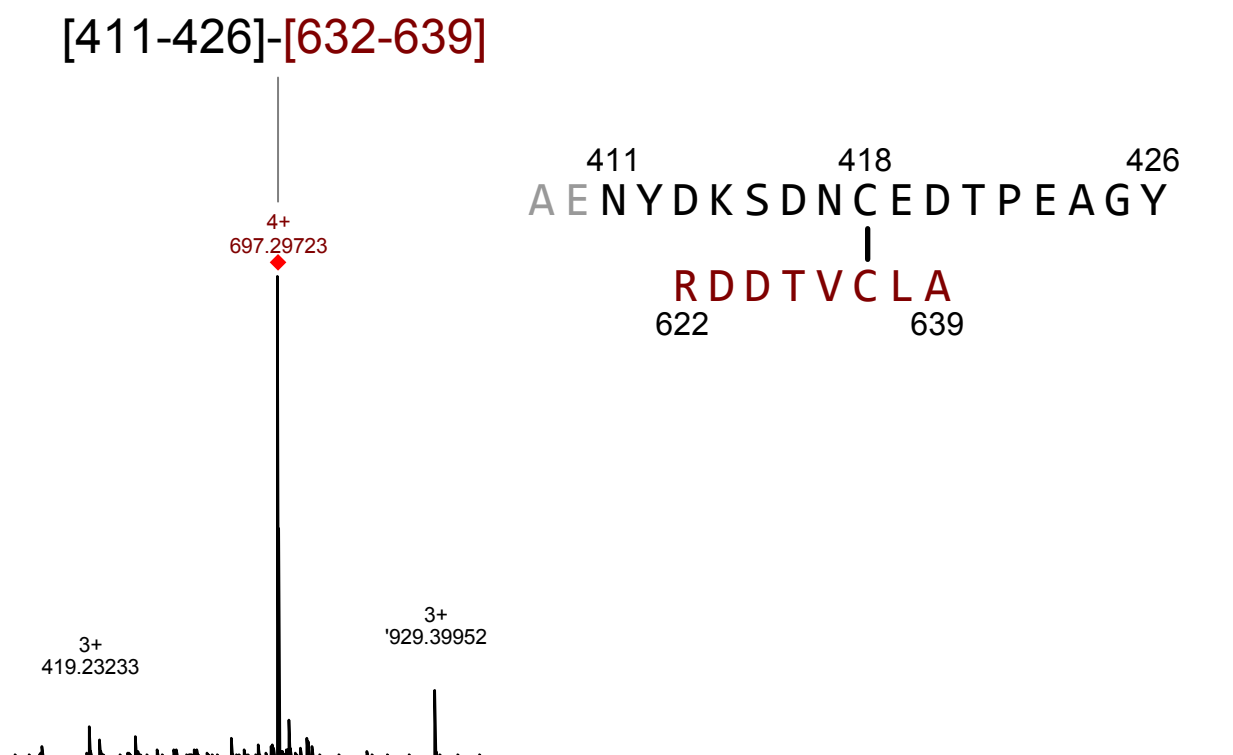


Figure S3. MS1 (top panel) and MS/MS (ECD) of the indicated 4+ precursor (lower panel) spectra acquired for disulfide linked peptide [411-426]-[632-639]. Sequence of the peptide indicates the position of the disulfide bond.

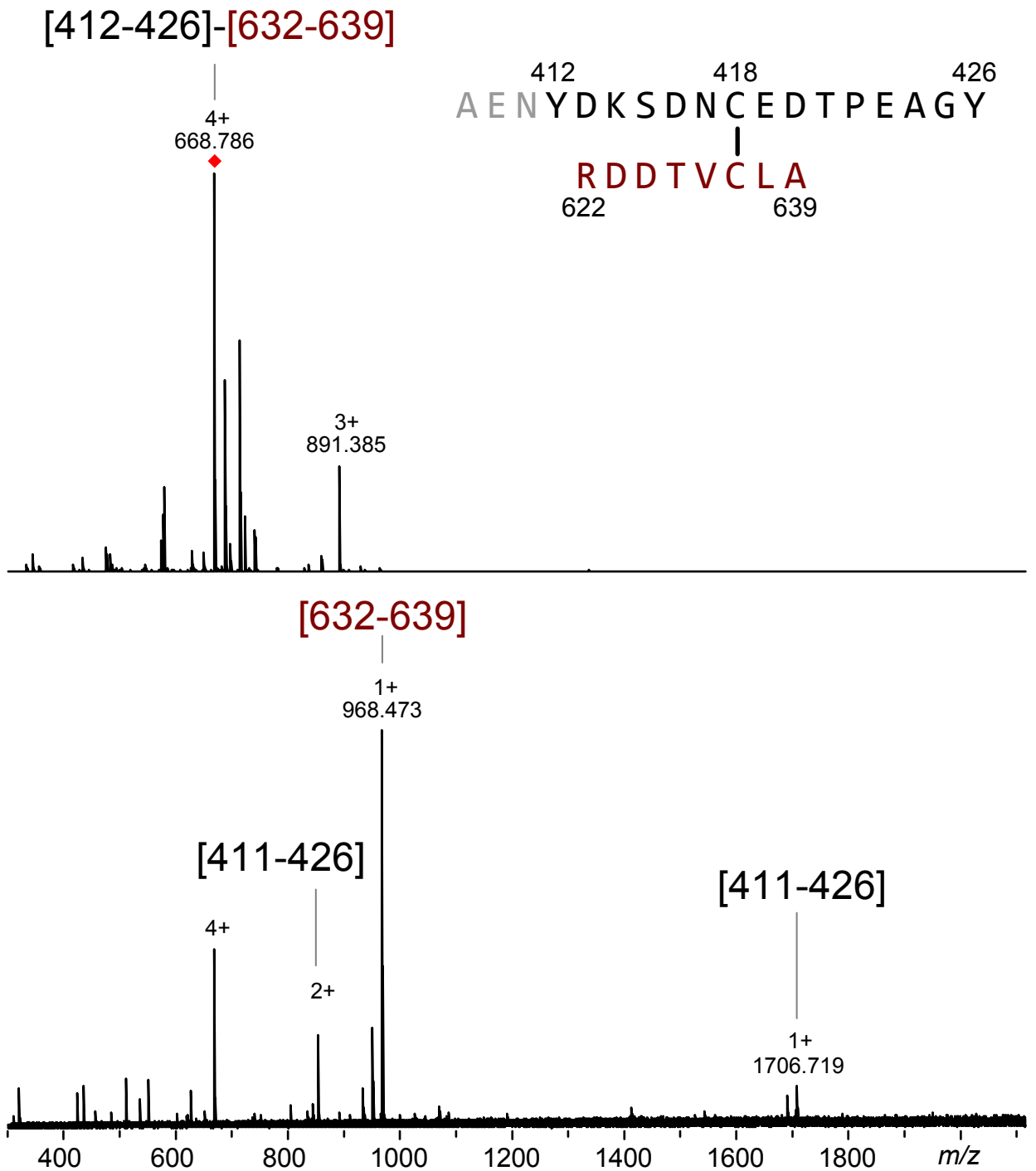


Figure S4. MS1 (top panel) and MS/MS (ECD) of the indicated 4+ precursor (lower panel) spectra acquired for disulfide linked peptide [412-426]-[632-639]. Sequence of the peptide indicates the position of the disulfide bond.

