

Supplementary Information

Comprehensive characterization of N- and O- glycosylation of SARS-CoV-2 human receptor angiotensin converting enzyme 2.

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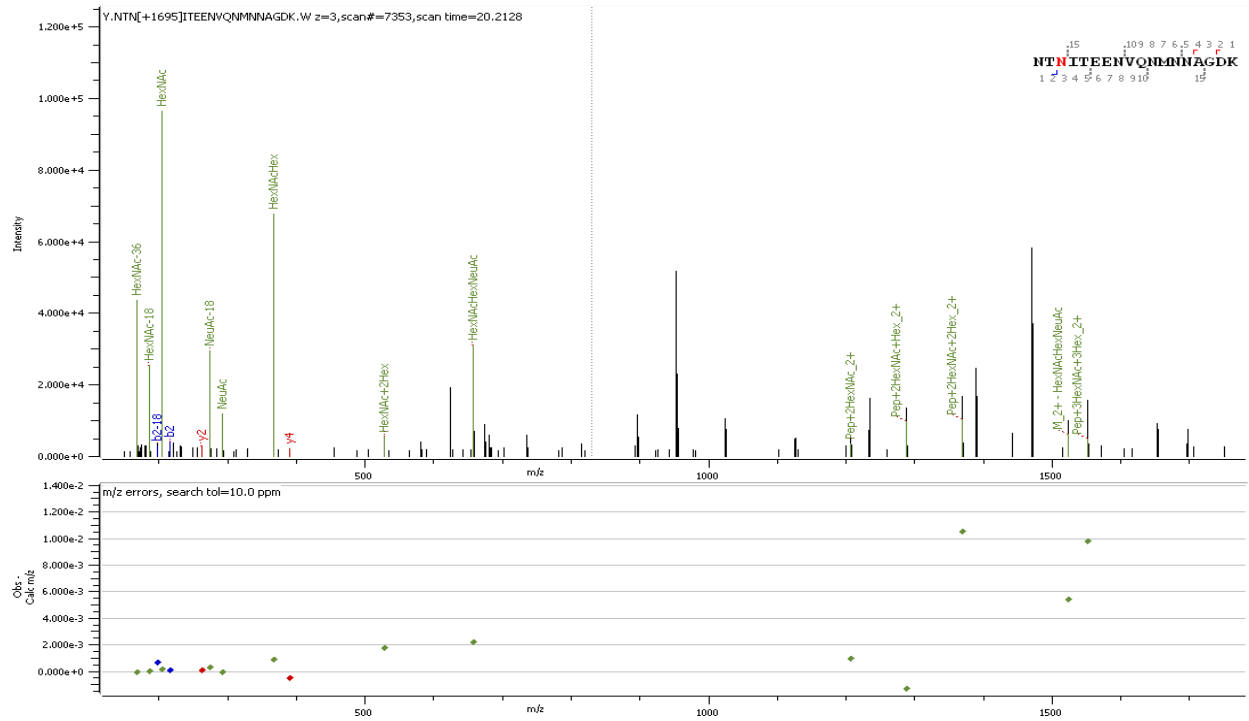
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Keywords: COVID-19 receptor, ACE2 glycosylation, SARS-CoV-2 receptor, ACE2 site mapping, hACE2 N-glycosylation.

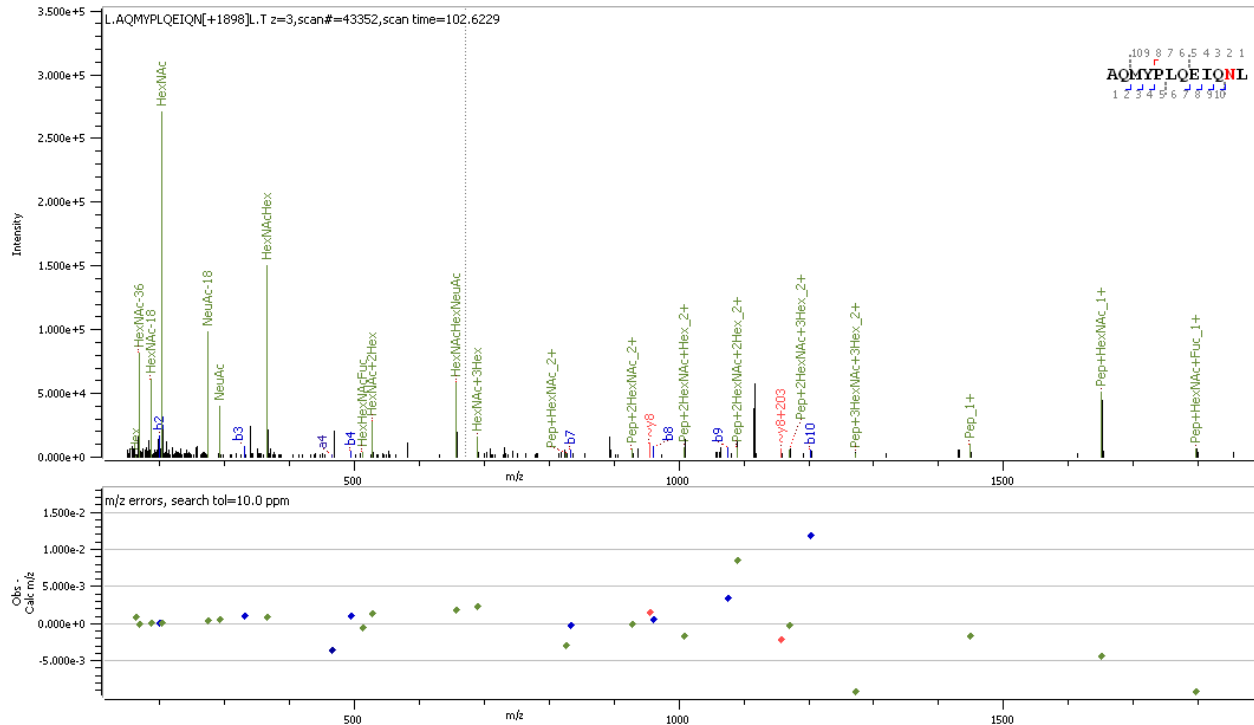
Table of Contents

| Description | Page No. |
|--|----------|
| Supp. Figure S1: Spectrum of intact N-glycopeptide with assigned N-glycans at 53 | S2 |
| Supp. Figure S2: Spectrum of intact N-glycopeptide with assigned N-glycans at 90 | S2 |
| Supp. Figure S3: Spectrum of intact N-glycopeptide with assigned N-glycans at 103 | S3 |
| Supp. Figure S4: Spectrum of intact N-glycopeptide with assigned N-glycans at N322 | S3 |
| Supp. Figure S5: Spectrum of intact N-glycopeptide with assigned N-glycans at N432 | S4 |
| Supp. Figure S6: Spectrum of intact N-glycopeptide with assigned N-glycans at N546 | S4 |
| Supp. Figure S7: Spectrum of intact N-glycopeptide with assigned N-glycans at N690 | S5 |
| Supp. Figure S8: Spectrum of intact O-glycopeptide with assigned O-glycans at O155 | S5 |
| Supp. Figure S9: Spectrum of intact O-glycopeptide with assigned O-glycans at O496 | S6 |
| Supp. Figure S10: MALDI-MS spectrum showing the permethylated N-glycans released from hACE2 by PNGase F. | S7 |
| Supp. Figure S11: MALDI-MS spectrum showing the permethylated O-glycans released from hACE2 by β -elimination. | S7 |

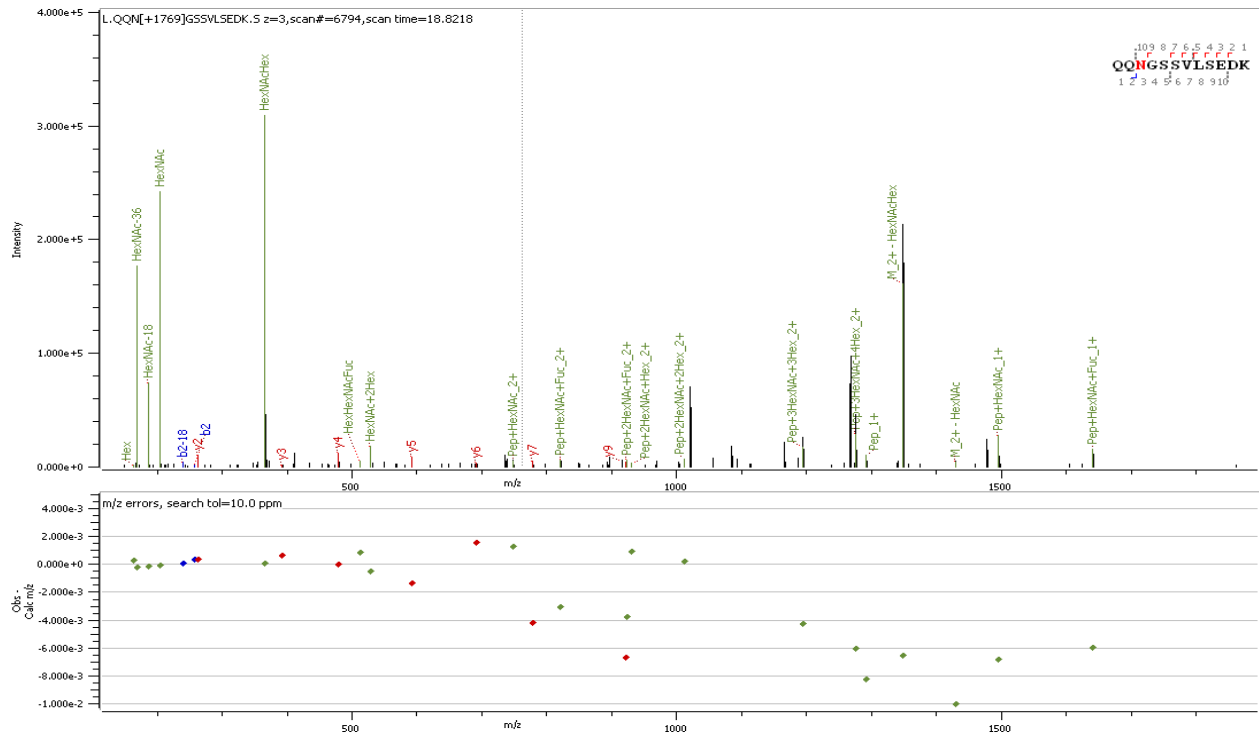
Glycopeptide Analysis:



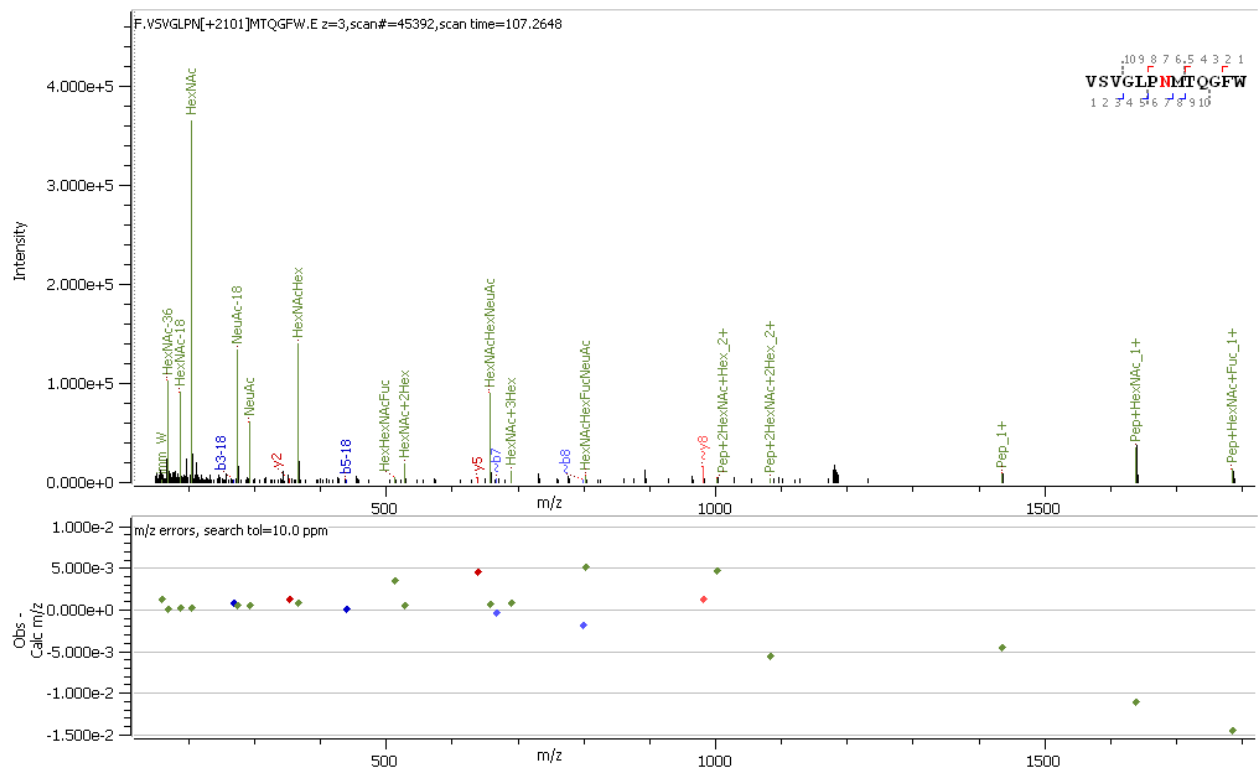
Supp. Figure S1: Representative HCD MS/MS spectrum of intact N-glycopeptide with assigned N-glycan (GlcNAc₂Fuc₁Man₃GlcNAc₁Gal₁NeuAc₁) at N53



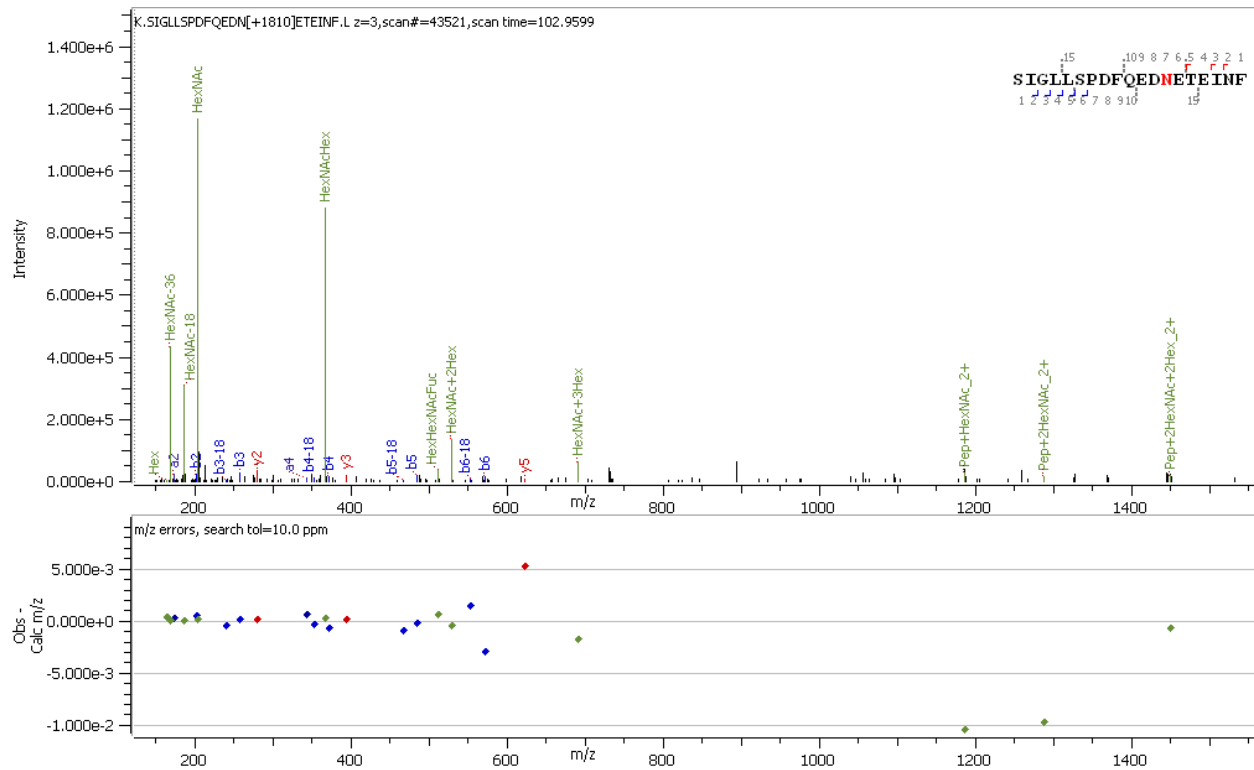
Supp. Figure S2: Representative HCD MS/MS spectrum of intact N-glycopeptide with assigned N-glycan (GlcNAc₂Fuc₁Man₃GlcNAc₂Gal₁NeuAc₁) at N90



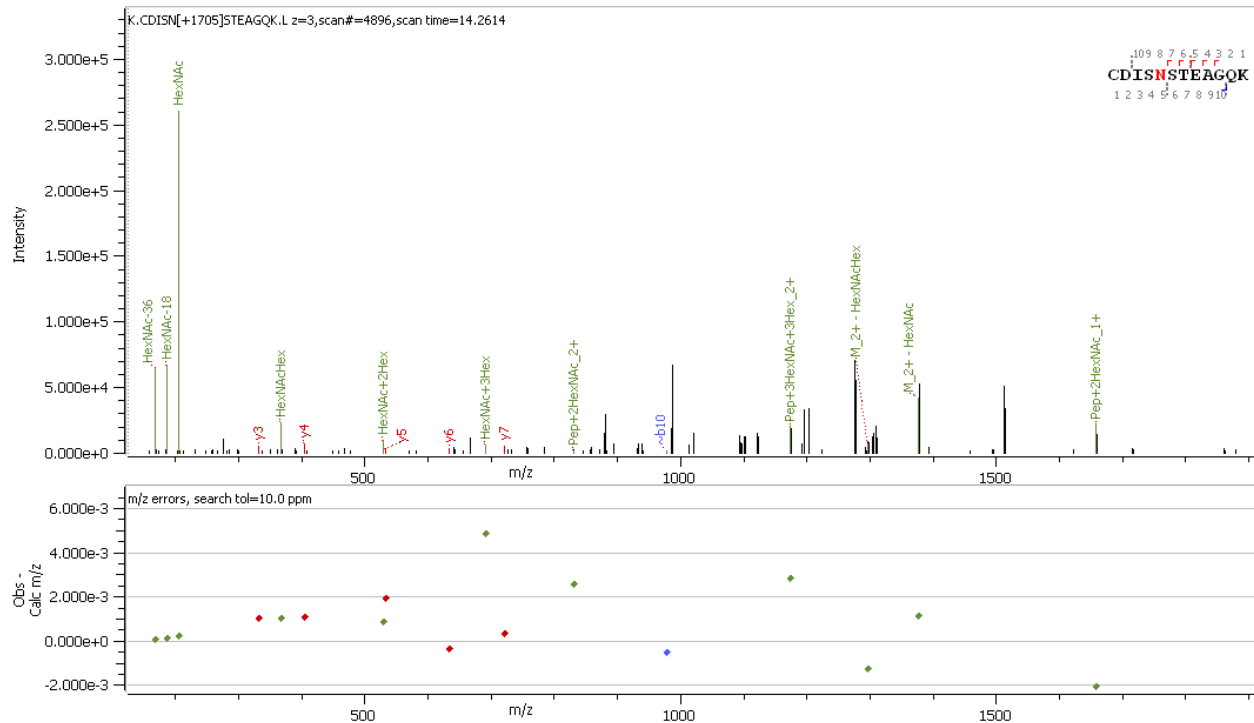
Supp. Figure S3: Representative HCD MS/MS spectrum of intact N-glycopeptide with assigned N-glycan (GlcNAc₂Fuc₁Man₃GlcNAc₂Gal₂) at N103



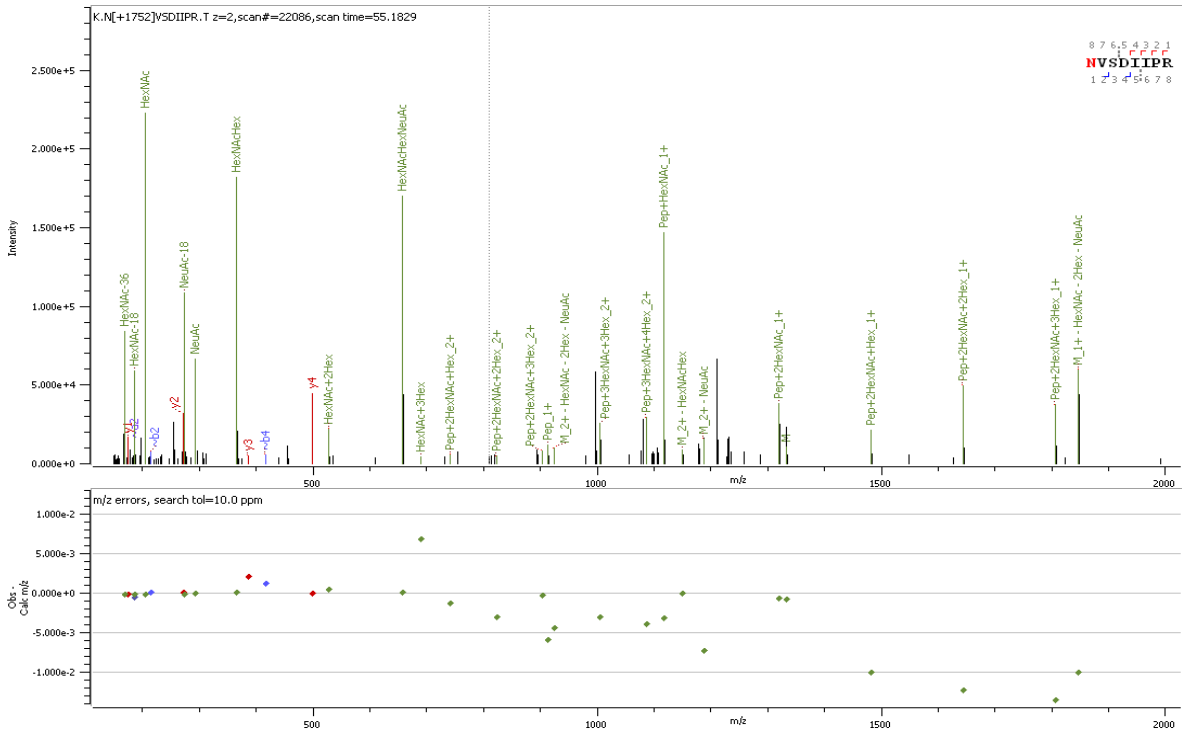
Supp. Figure S4: Representative HCD MS/MS spectrum of intact N-glycopeptide with assigned N-glycan (GlcNAc₂Fuc₁Man₃GlcNAc₃Gal₁NeuAc₁) at N322



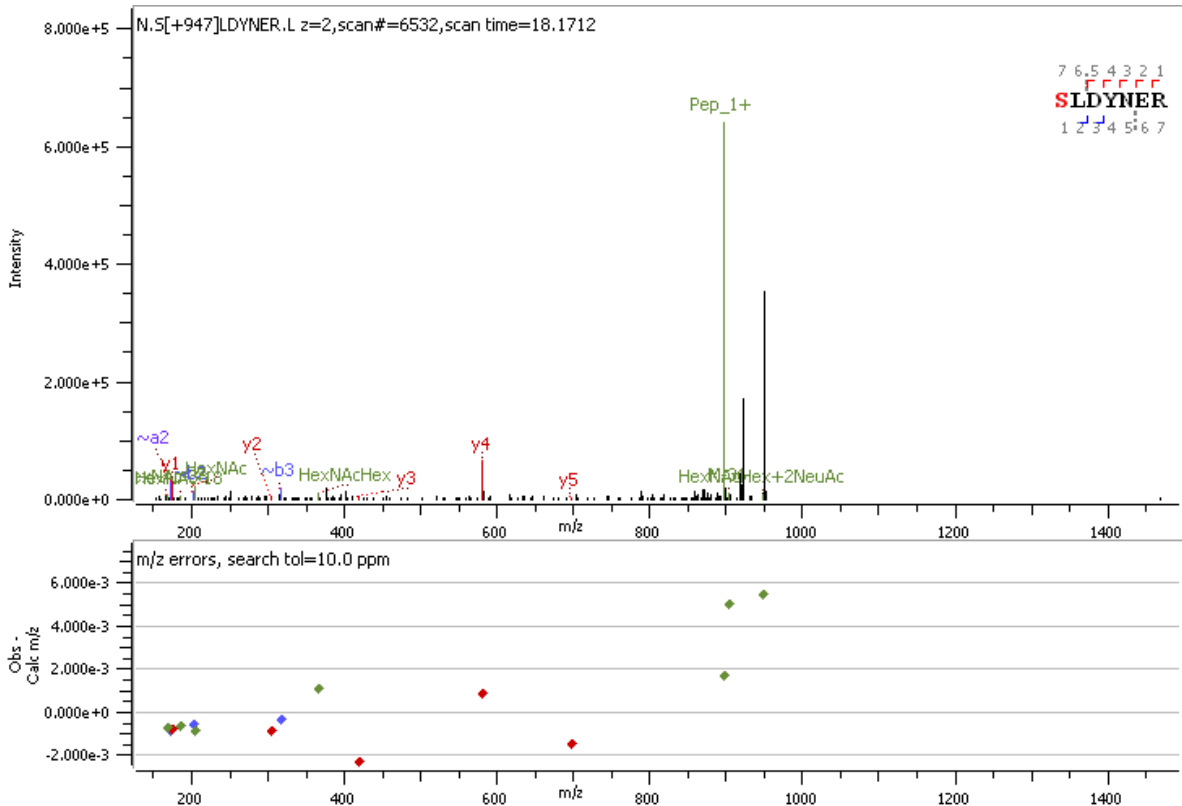
Supp. Figure S5: Representative HCD MS/MS spectrum of intact N-glycopeptide with assigned N-glycan (GlcNAc₂Fuc₁Man₃GlcNAc₃Gal₁) at N432



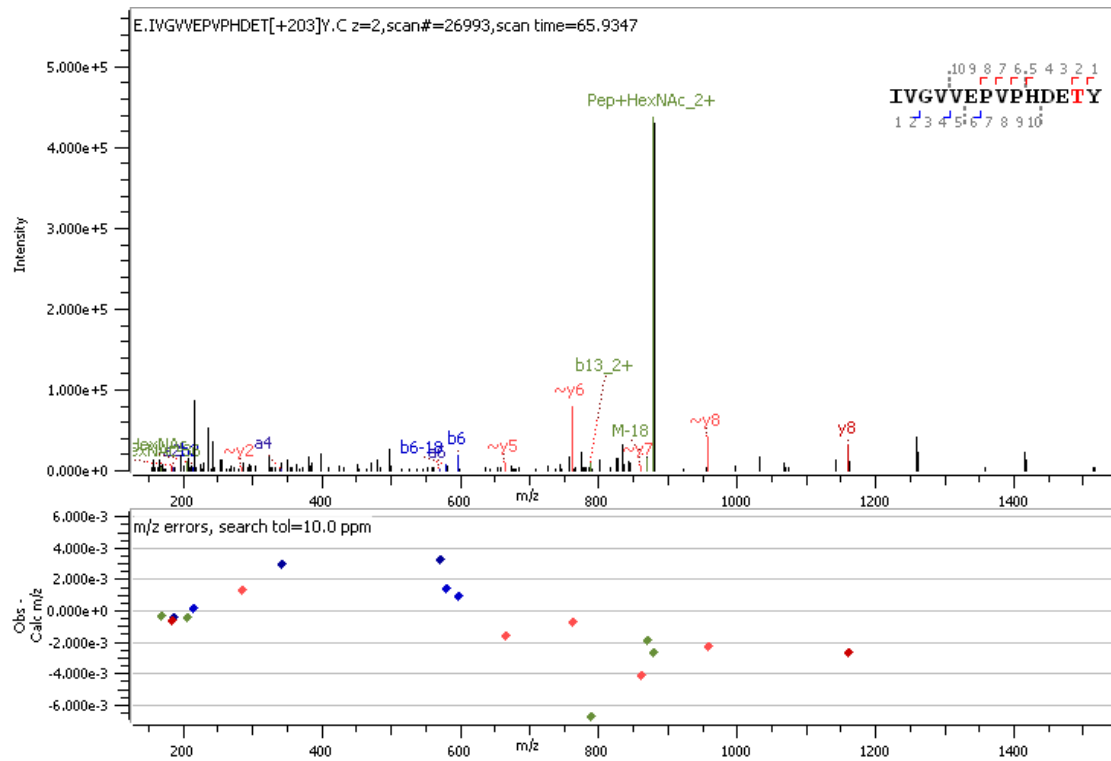
Supp. Figure S6: Representative HCD MS/MS spectrum of intact N-glycopeptide with assigned N-glycan (GlcNAc₂Man₃GlcNAc₄) at N546



Supp. Figure S7: Representative HCD MS/MS spectrum of intact N-glycopeptide with assigned N-glycan (GlcNAc₂Man₃GlcNAc₂Gal₁NeuAc₁) at N690

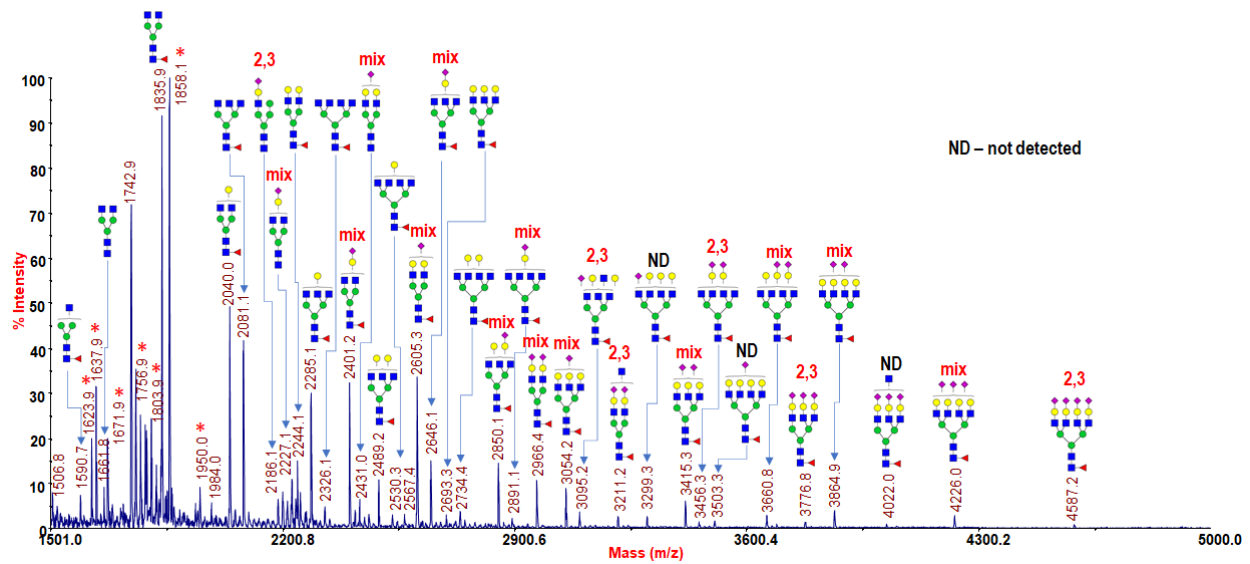


Supp. Figure S8: Representative HCD MS/MS spectrum of intact O-glycopeptide with assigned O-glycan (GalNAcGalNeuAc₂) at O155.

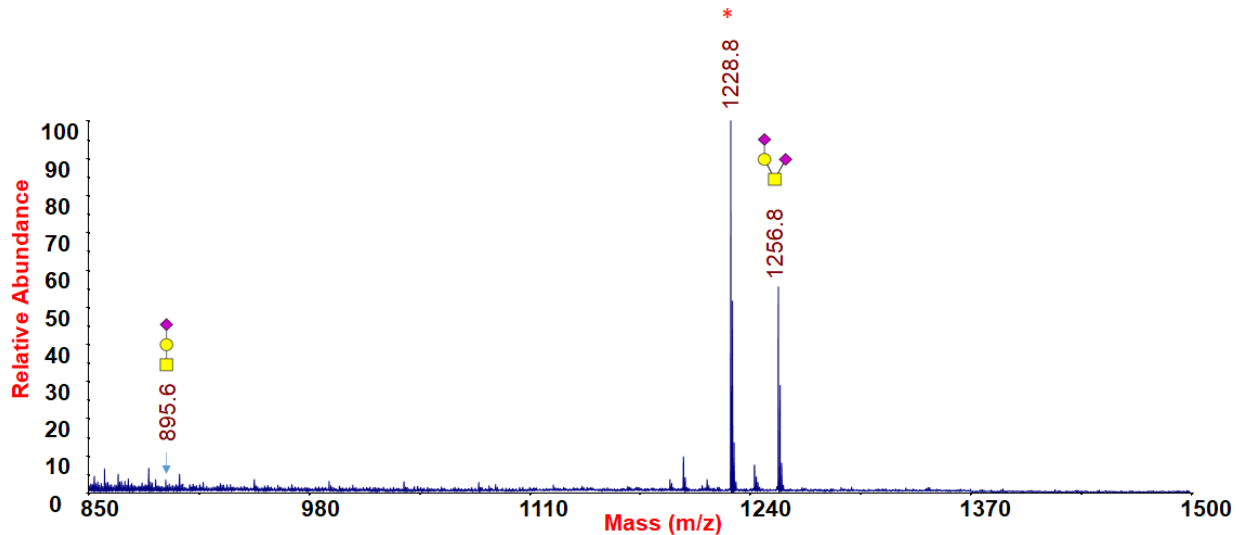


Supp. Figure S9: Representative HCD MS/MS spectrum of intact O-glycopeptide with assigned O-glycan (HexNAc) at O496.

Glycomics Analysis:



Supp. Figure S10: MALDI-MS spectrum showing the permethylated N-glycans released from hACE2 by PNGase F along with sialic acid linkages (determined by ESI-MSⁿ).



Supp. Figure S11: MALDI-MS spectrum showing the permethylated O-glycans released from hACE2 by β -elimination.