

**Supporting information for**

**Site-Specific Profiling of Serum Glycoproteins Using N-Linked Glycan and Glycosite Analysis  
Revealing Atypical N-Glycosylation Sites on Albumin and  $\alpha$ -1B-Glycoprotein**

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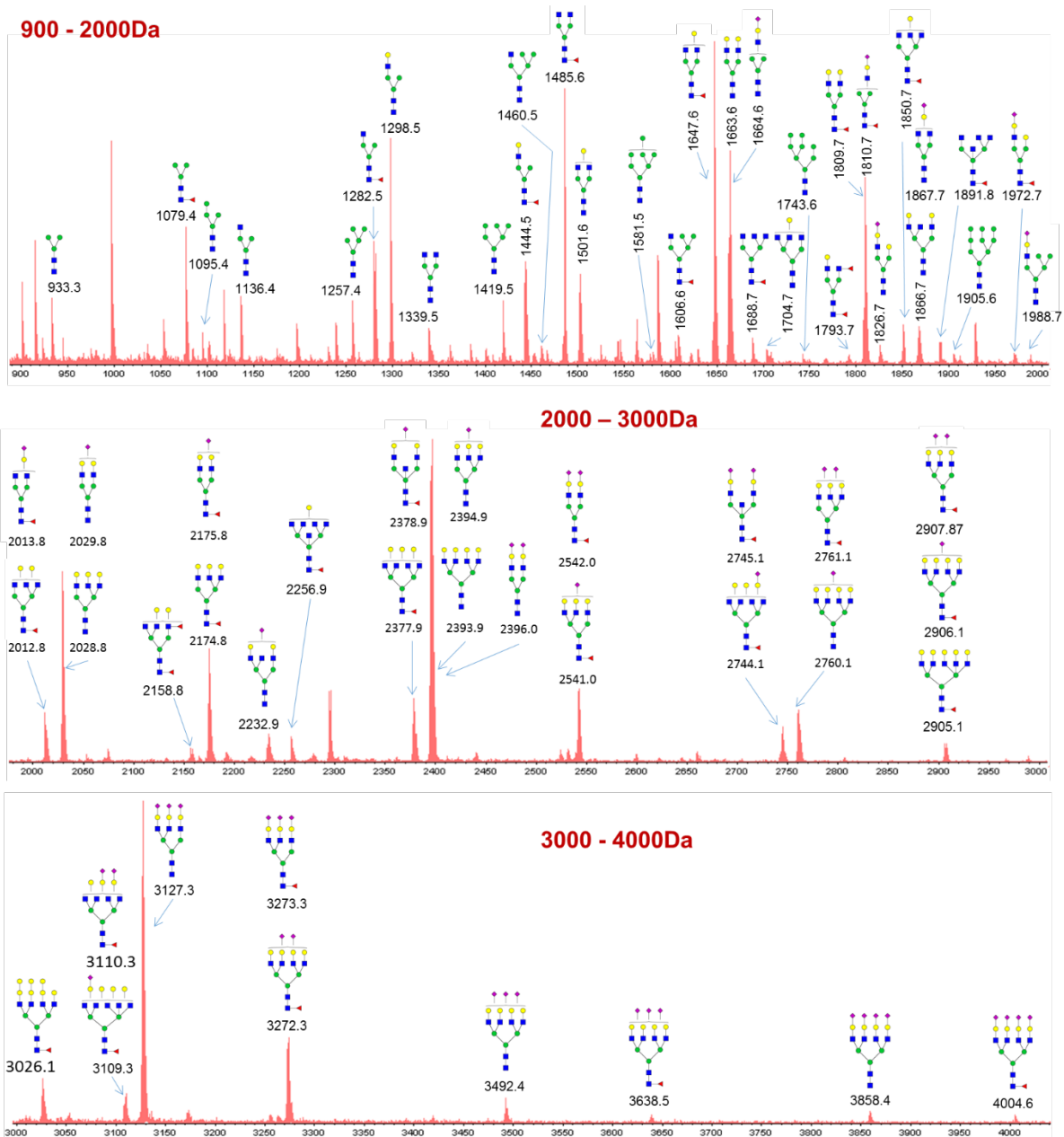
Supplementary Tables:

**Supplementary Table S1.** N-Linked glycans identified from human serum using NGAG method.

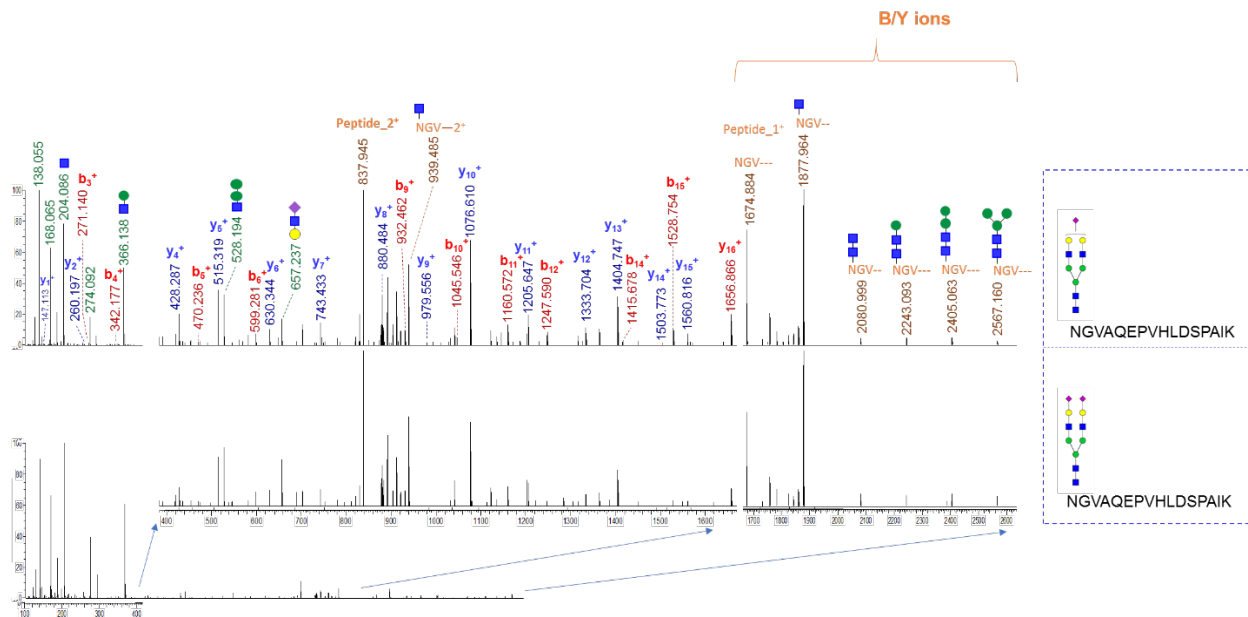
**Supplementary Table S2.** Glycosite-containing peptides identified from human sera by NGAG method.

**Supplementary Table S3.** All glycosite-containing peptides identified from human sera (reported previously).

**Supplementary Table S4.** Intact glycopeptides identified from human sera.



**Supplementary Figure 1.** N-linked glycans identified from human sera by using NGAG method coupled with MALDI-TOF-MS analysis. One possible glycan structure per glycan mass was shown on the figure based on the glycan masses.



**Supplementary Figure 2.** Identification and validation of an atypical *N*-glycosite on alpha-1B-glycoprotein (A1BG) using site-specific glycosylation analysis. (A) A spectrum of the intact glycopeptide  $^{62}\text{N}_\# \text{GVAQEPVHLDSPAIK} + \text{HexNAc}_4\text{Hex}_5\text{Ac}_1$  from A1BG. (B) A spectrum of the intact glycopeptide  $^{62}\text{N}_\# \text{GVAQEPVHLDSPAIK} + \text{HexNAc}_4\text{Hex}_5\text{Ac}_2$  from A1BG. The oxonium ions (green) were used to extract the intact glycopeptide spectrum, the masses of the precursor and peptide/peptide+glycan fragment ions (orange) as well as the b/y-ions of the peptide portion (b-ions: blue; y-ions: red) were used for intact glycopeptide identification.