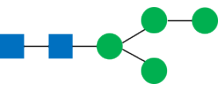
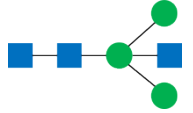
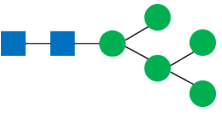
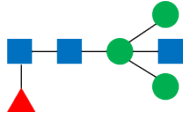
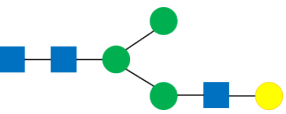
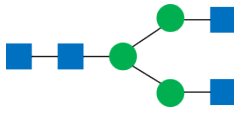
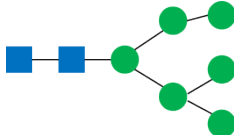
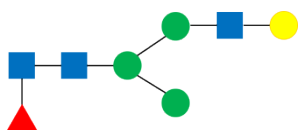
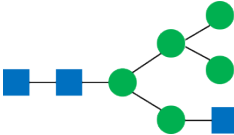
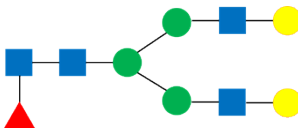
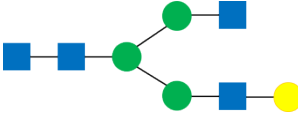
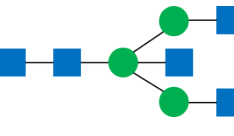
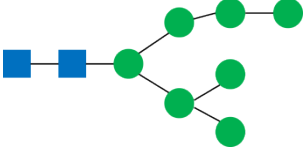
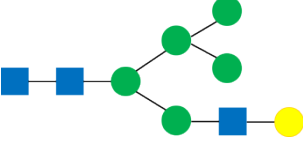
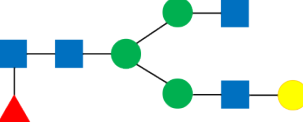
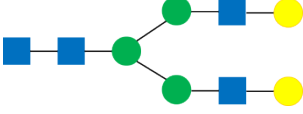
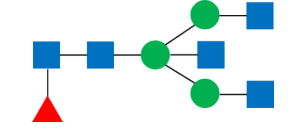
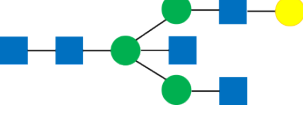
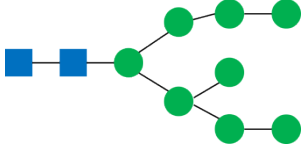


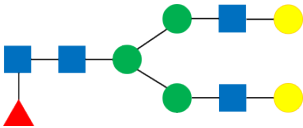
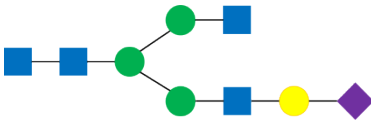
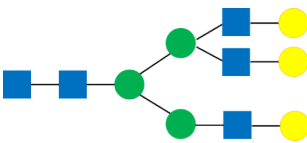
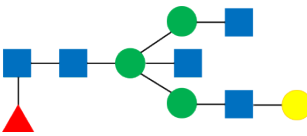
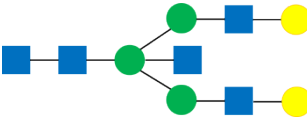
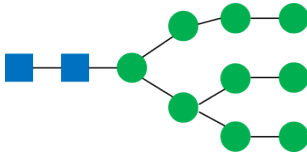
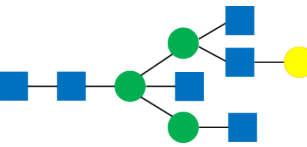
Supporting information

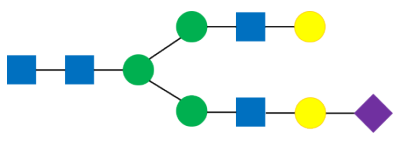
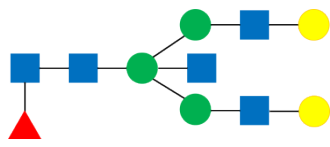
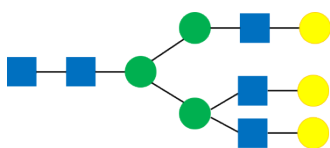
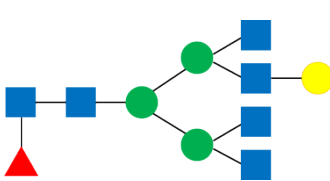
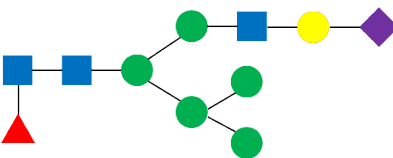
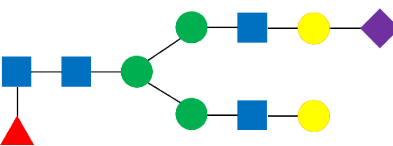
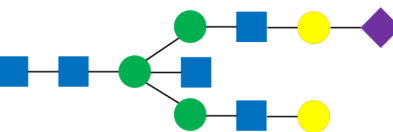
Table S1. The detected forty-one of N-glycan from human serum by the enrichment of $\text{Fe}_3\text{O}_4@3\cdot\text{SiO}_2@m\text{SiO}_2\text{-C}$ (N-glycans were released by PNGase F digestion, and glycan strcutures were searched from <http://www.functionalglycomics.org> through the Mol. wt of oligosaccharide. Part of the strcutures has been demonstrated. Symbols in composition: H=Hexose; N=N-Acetyl hexosamine; F=Fucose; A=N-Acetylneuramic Acid. ●, Mannose; ●, Galactose; ■, GlcNAc; ◆, Sialic Acid; ▲, Fucose.)

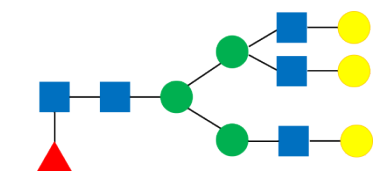
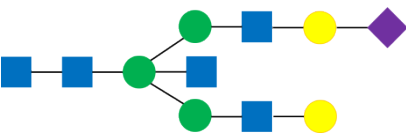
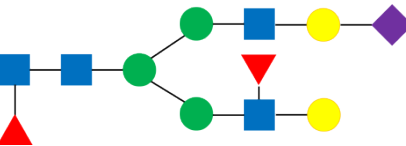
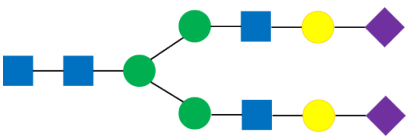
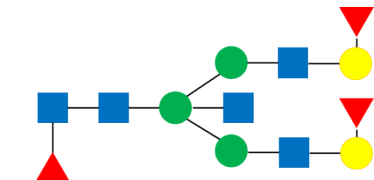
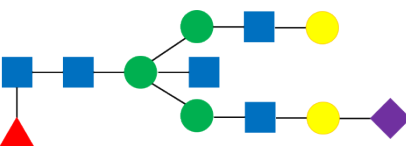
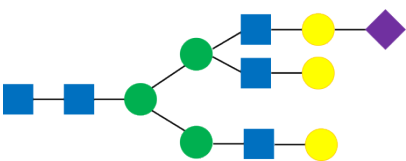
No	M/Z ([M+nNa] ⁺)	Structure (M)	Composition
1	1095		H4N2
2	1136		H3N3
3	1257		H5N2
4	1282		H3N3F1
5	1298		H4N3

6	1339		H3N4
7	1419		H6N2
8	1444		H4N3F1
9	1460		H5N3
10	1485		H3N4F1
11	1501		H4N4
12	1542		H3N5

13	1581		H7N2
14	1621		H6N3
15	1647		H4N4F1
16	1663		H5N4
17	1688		H3N5F1
18	1704		H4N5
19	1743		H8N2

20	1809		H5N4F1
21	1814		H4N4A1
22	1825		H6N4
23	1850		H4N5F1
24	1866		H5N5
25	1905		H9N2
26	1909		H4N6

27	1976		H5N4A1
28	2012		H5N5F1
29	2028		H6N5
30	2054		H4N6F1
31	2056		H6N3F1A1
32	2122		H5N4F1A1
33	2158		H5N5A1

34	2174		H6N5F1
35	2178		H5N5A1
36	2267		H5N4F2A1
37	2288		H5N4A2
38	2305		H5N5F3
39	2326		H5N5F1A1
40	2341		H6N5A1

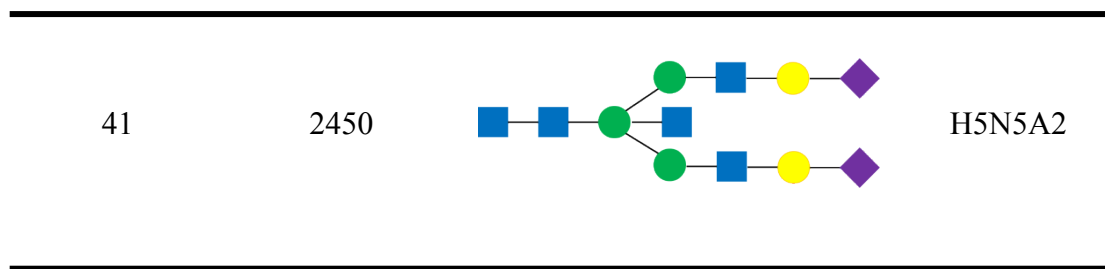


Fig. S1

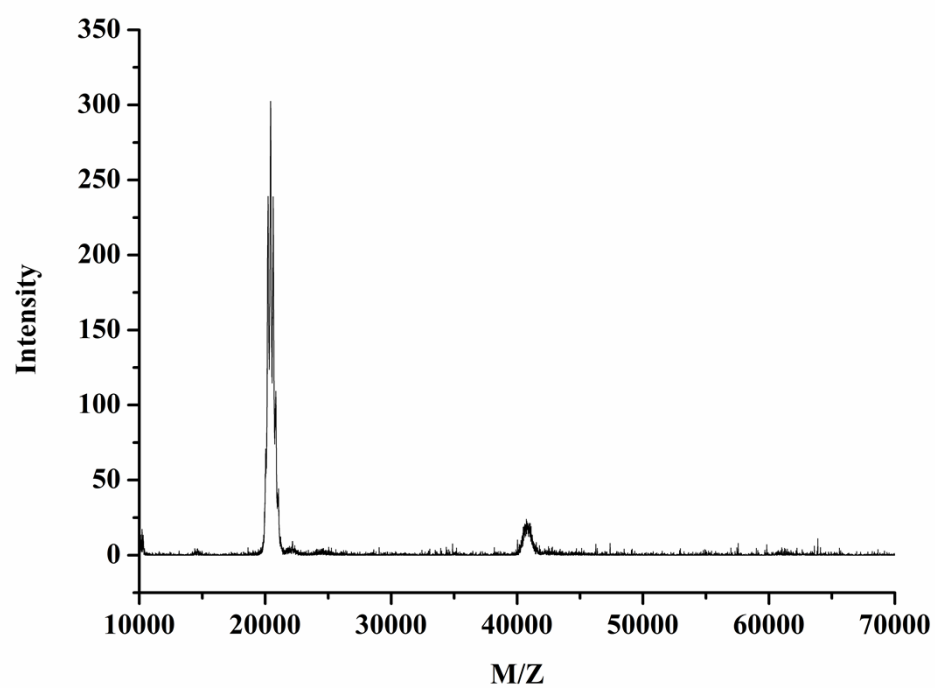


Fig. S2

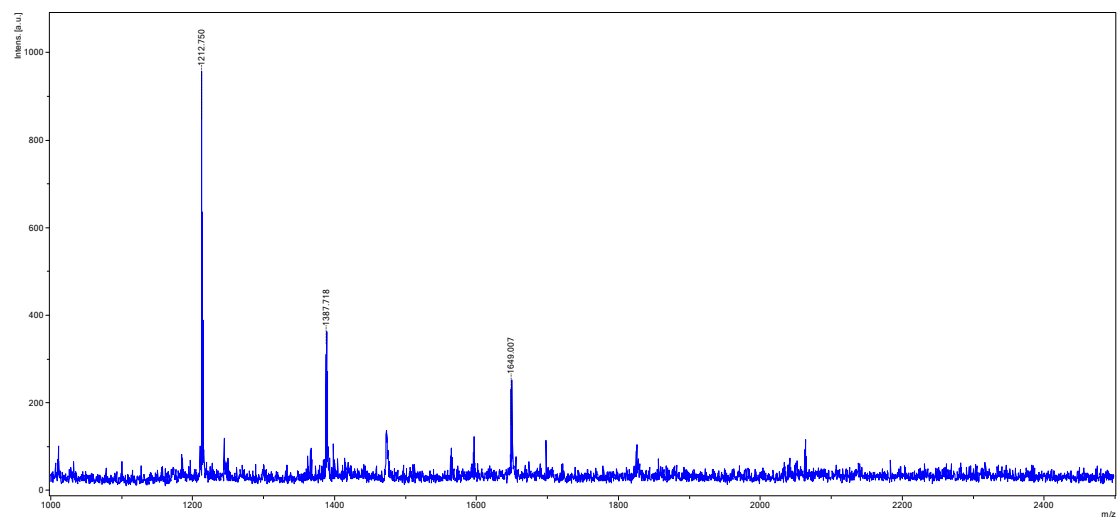


Fig. S3

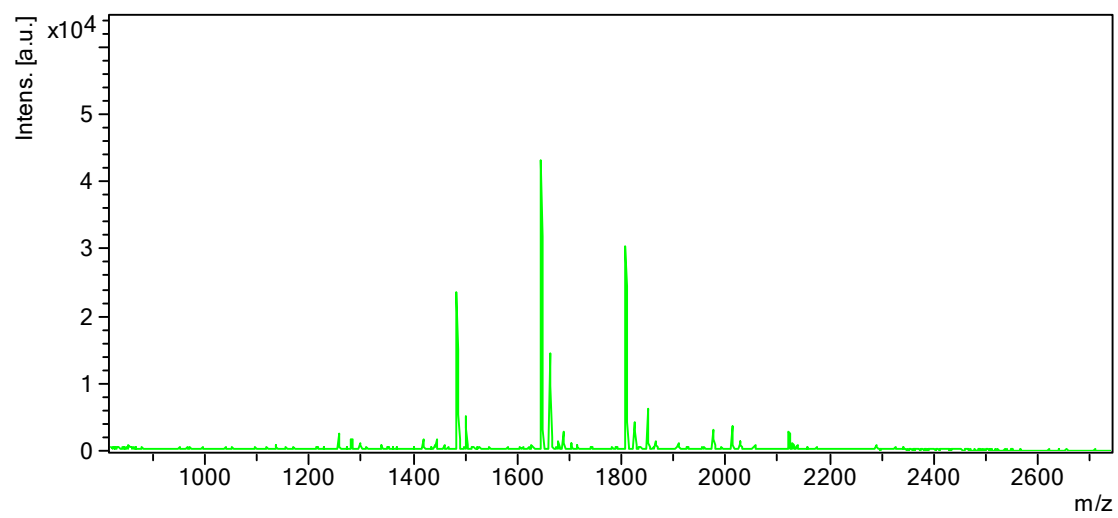
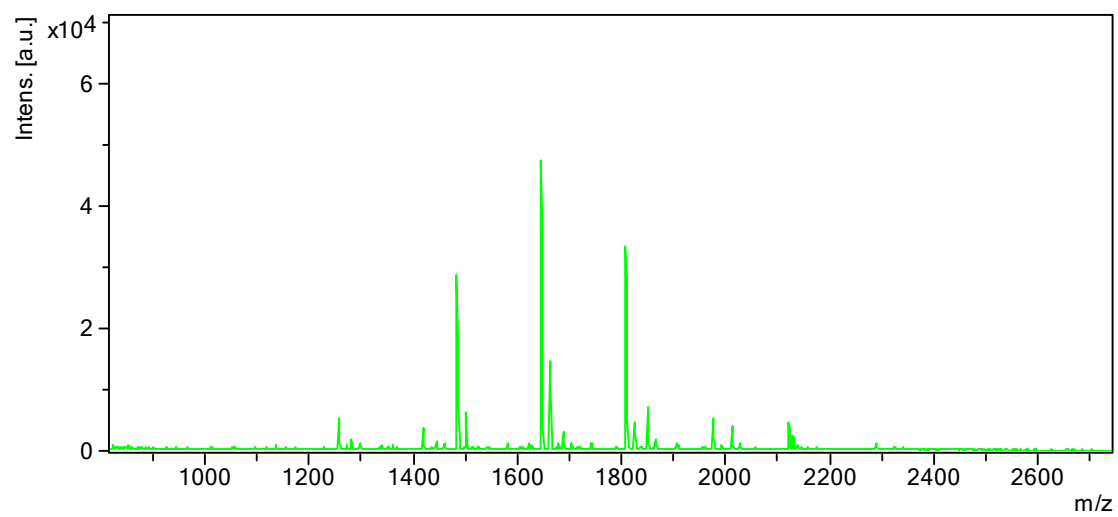


Figure Caption

Fig. S1 MALDI-TOF MS analysis of proteins in the elution after enriched with active carbon.

Fig. S2 MALDI-TOF MS analysis of N-linked glycan released from human serum before enrichment.

Fig. S3 MALDI-TOF MS analysis of N-linked glycan released from human serum mixture after enriched by reused $\text{Fe}_3\text{O}_4@3\text{SiO}_2@m\text{SiO}_2\text{-C}$.