Ludger

Certificate of Analysis

IgG Glycan Library

Product can be shipped at ambient and on arrival stored at –20°C.

Cat. # : CLIBN-IGG-01 Batch # : B11V-01 Size : ~25 µg

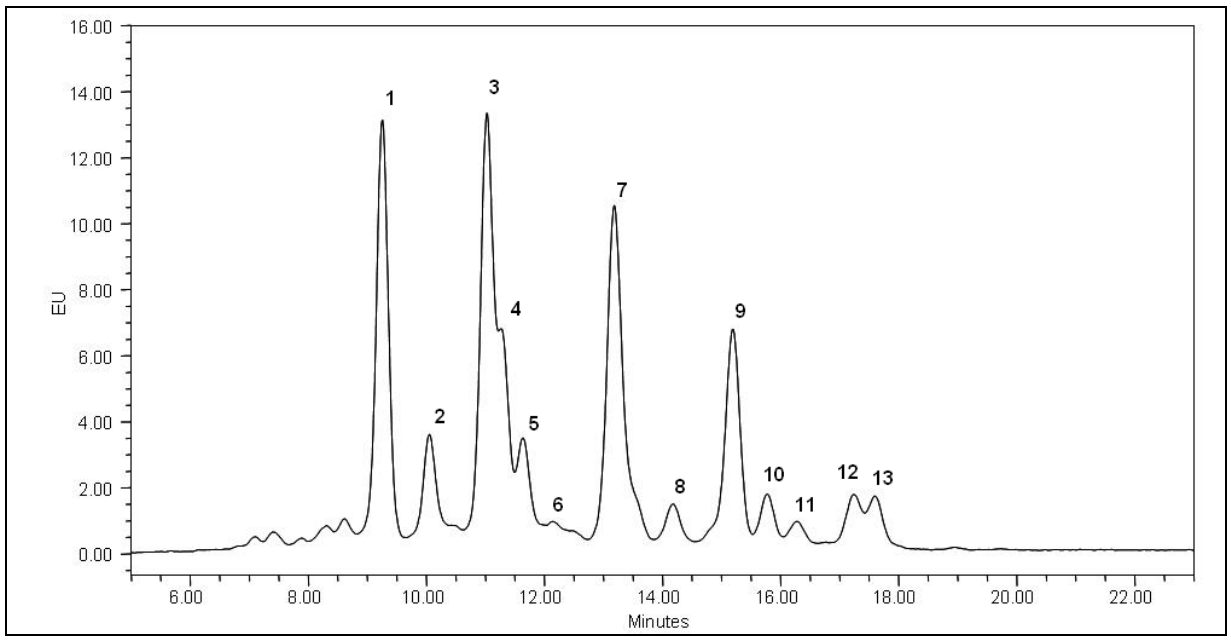


Figure 1: LudgerSep-N2 HPLC Profile of 2AB Labelled IgG N-Glycans, released by N-Mode hydrazinolysis (see Table 1 for peak assignments).

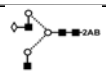
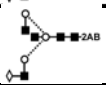
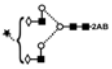
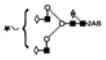
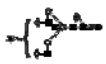
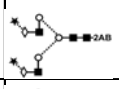
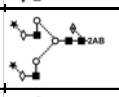
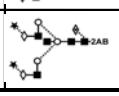
Peak	Name	Structure	Area %	GU value
1	F(6)A		16.	5.7
2	F(6)A2		5.	6.1
2	A2[6]G(4)1			
2	A2[6]BG(4)1			
3	A2[3]G(4)1		18.	6.6
3	A2[3]BG(4)1			
3	F(6)A2[6]G(4)1			
4	F(6)A2[3]G(4)1		6.8	6.7
5	F(6)A2[6]BG(4)1		4.	6.8
5	F(6)A2[3]BG(4)1			
6	A2G(4)		1.	7.0
7	F(6)A2G(4)2		18.	7.5
7	F(6)A2BG(4)2			
8	A2G(4)2S1		2.	7.9
9	F(6)A2G(4)2S1		10.	8.4
1	F(6)A2BG(4)2S1		2.	8.6
1	A2G(4)2S2		1.	8.8
1	A2BG(4)2S2		3.	9.2
1	F(6)A2G(4)2S2			
1	F(6)A2BG(4)2S2		2.	9.3

Table 1: Names, structures and GU values of each peak from LudgerSep-N2 HPLC. (*Some variation in the GU values of glycans is not unusual, particularly for glycans with sialic acid in the structure*).

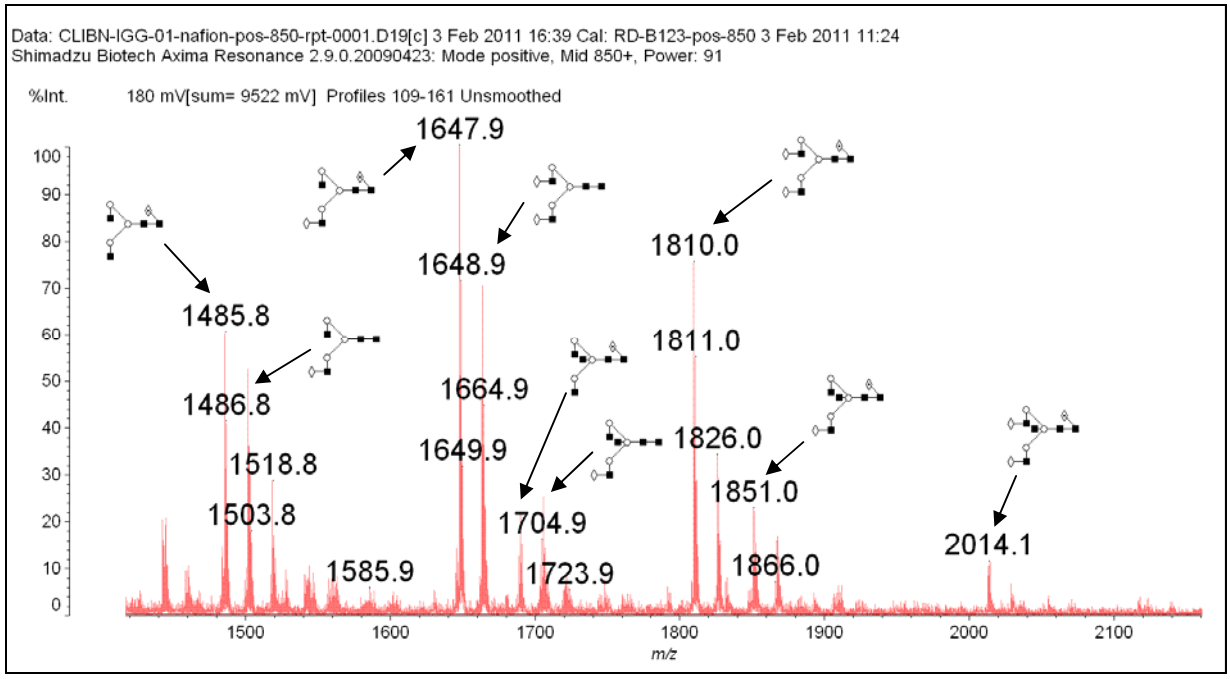
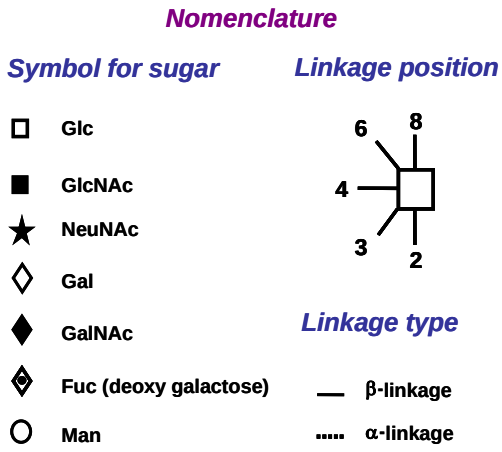


Figure 2: Mass spectrum of IgG N-Glycans, released by N-Mode hydrazinolysis performed on Shimadzu Biotech Resonance MALDI-Ion Trap with DHB matrix. Sample cleaned using Naffion Membrane. Sialylation not stable using this method.



Structure Abbreviations

All N-glycans have two core GlcNAcs; F at the start of the abbreviation indicates a core fucose, (6) after the F indicates that the fucose is α1-6 linked to the inner GlcNAc; Mx, number (x) of mannose on core GlcNAcs; Ax, number of antenna (GlcNAc) on trimannosyl core; A2, biantennary with both GlcNAcs as β1-2 linked; A3, triantennary with a GlcNAc linked β1-2 to both mannose and the third GlcNAc linked β1-4 to the α1-3 linked mannose; A3', triantennary with a GlcNAc linked β1-2 to both mannose and the third GlcNAc linked β1-6 to the α1-6 linked mannose; A4, GlcNAcs linked as A3 with additional GlcNAc β1-6 linked to α1-6 mannose; B, bisecting GlcNAc linked β1-4 to β1-3 mannose; Gx, number (x) of linked galactose on antenna, (4) or (3) after the G indicates that the Gal is β1-4 or β1-3 linked; [3]G1 and [6]G1 indicates that the galactose is on the antenna of the α1-3 or α1-6 mannose; Sx, number (x) of sialic acids linked to galactose; the numbers 3 or 6 in parentheses after S indicate whether the sialic acid is in an α2-3 or α2-6 linkage.