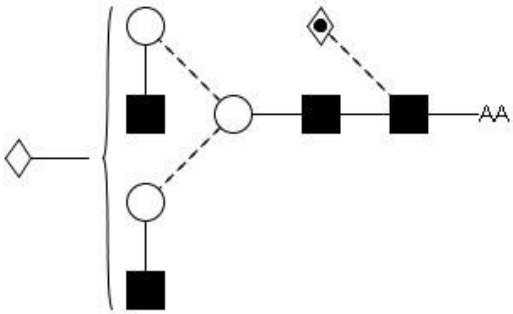
Certificate of Analysis

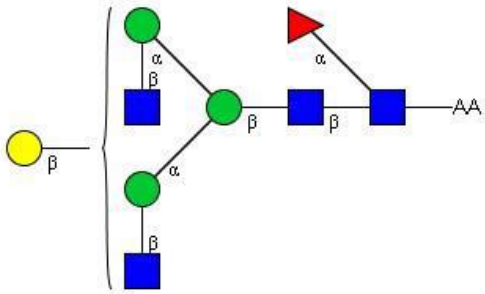
LudgerPure™ 2AA Labeled FA2G1 Glycan

Cat. #: CAA-FA2G1-01 Batch: B65P-07 Size: approx. 100 pmol

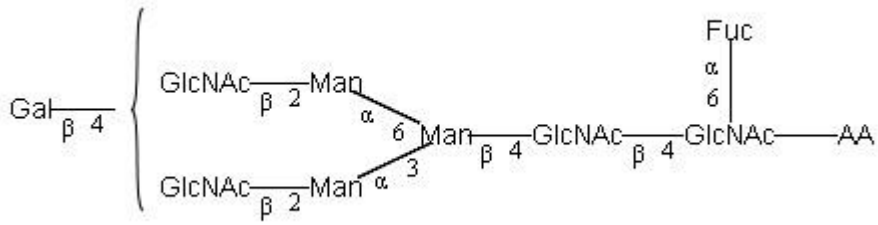
Structure



Oxford Notation



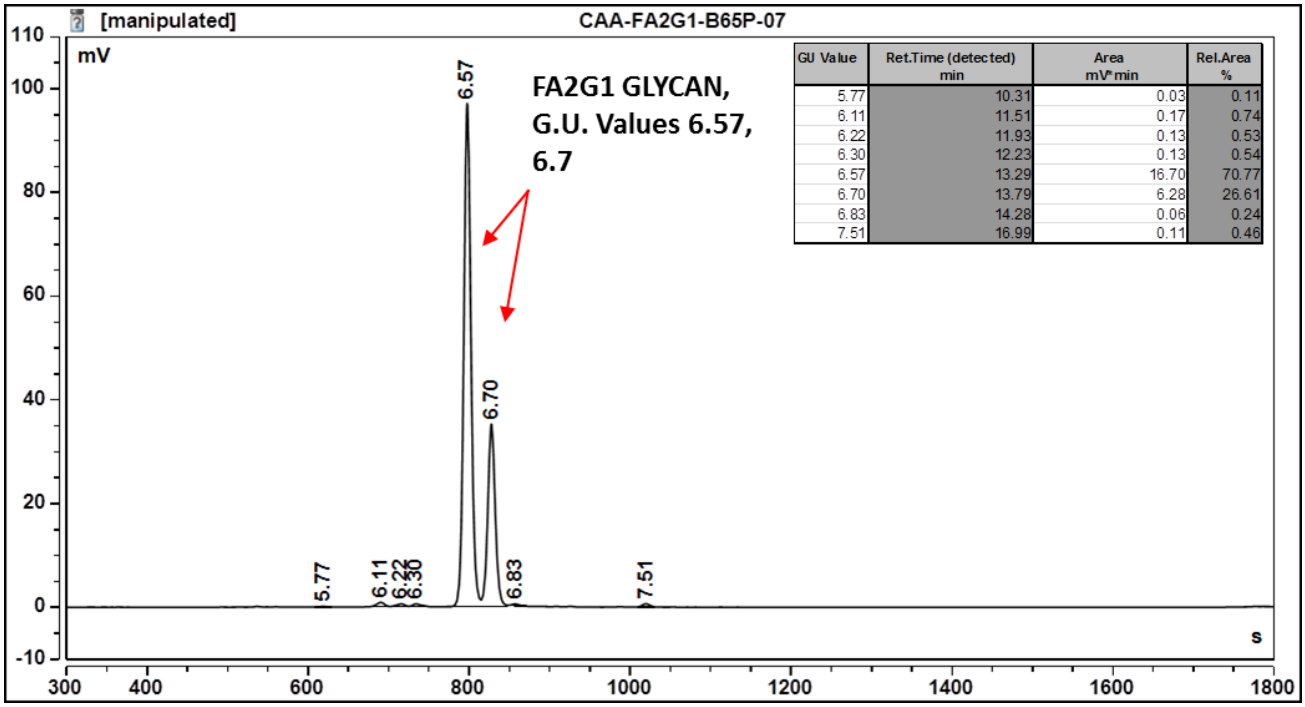
CFG Notation



Text Notation

Purity: 97.4% 2AA labeled FA2G1 glycan, as assessed by HPLC - see Fig 1.

Amount: Sample vial determined to contain 101.7 pmols FA2G1 glycan – Test performed 27 May 2016.



GU Value	Ret.Time (detected) min	Area mV*min	Rel.Area %
5.77	10.31	0.03	0.11
6.11	11.51	0.17	0.74
6.22	11.93	0.13	0.53
6.30	12.23	0.13	0.54
6.57	13.29	16.70	70.77
6.70	13.79	6.28	26.61
6.83	14.28	0.06	0.24
7.51	16.99	0.11	0.46

Figure 1: HILIC HPLC profile of 2AA labelled FA2G1 glycan (see method conditions below) (Cat. #: CAB-FA2G1-01, Batch B65P-07).

**FA2G1 glycan structure identified by MALDI, MS & HPLC (GU value comparison to GlycoBase). This structure is drawn according to the scheme developed by Oxford-Dublin Glycobiology Laboratory* (see Fig 2).

2-AA FA2G1 peak seen above, eluted at 13.18 & 13.68 minutes, under the following conditions:

Column: **Waters BEH Glycan 1.7µm column (150mm)**

Flow: 0.4mL/min.

Temperature: 40 °C

Solvent A: 50mM ammonium formate pH 4.4 Solvent B: 100 % acetonitrile

Gradient:

Time (min)	%B
0.0	0.0
72.0	72.0
27.0	27.0
62.0	62.0
30.0	30.0
100.0	100.0

Detector: WATERS FLD-AQUITY Excitation wavelength: 250 nm Emission wavelength: 428 nm

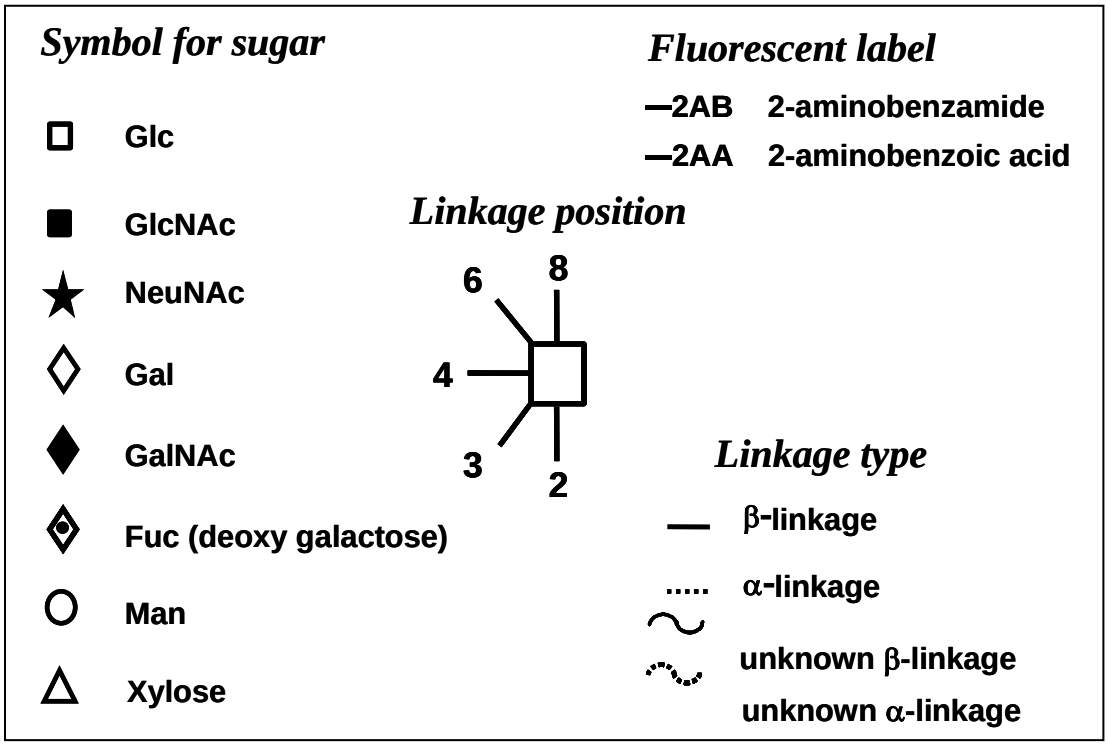


Figure 2: GlycoBase glycan structure key.