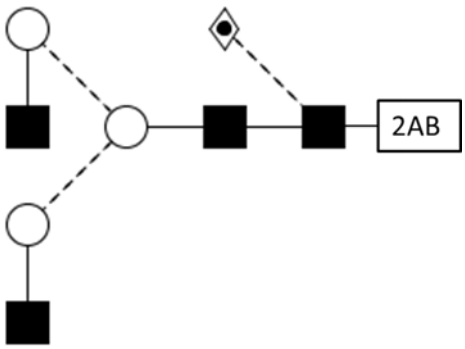
Certificate of Analysis

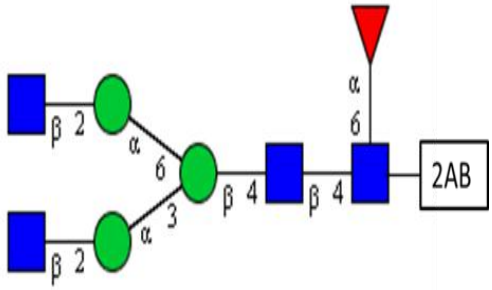
LudgerPure™ 2AB Labeled NGA2F Glycan

Cat. #: CAB-NGA2F-01 Batch: B486-03 Size: approx. 100 pmol

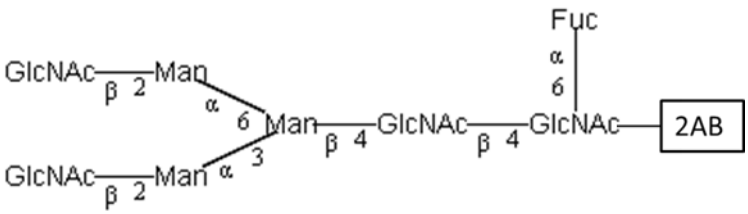
Structure



Oxford Notation



CFG Notation



Text Notation

Purity: 96.86% 2AB labeled NGA2F glycan, as assessed by HPLC - see Fig 1.

Amount: Sample vial determined to contain 102 pmols NAG2F glycan – Test performed 08th August 2014.

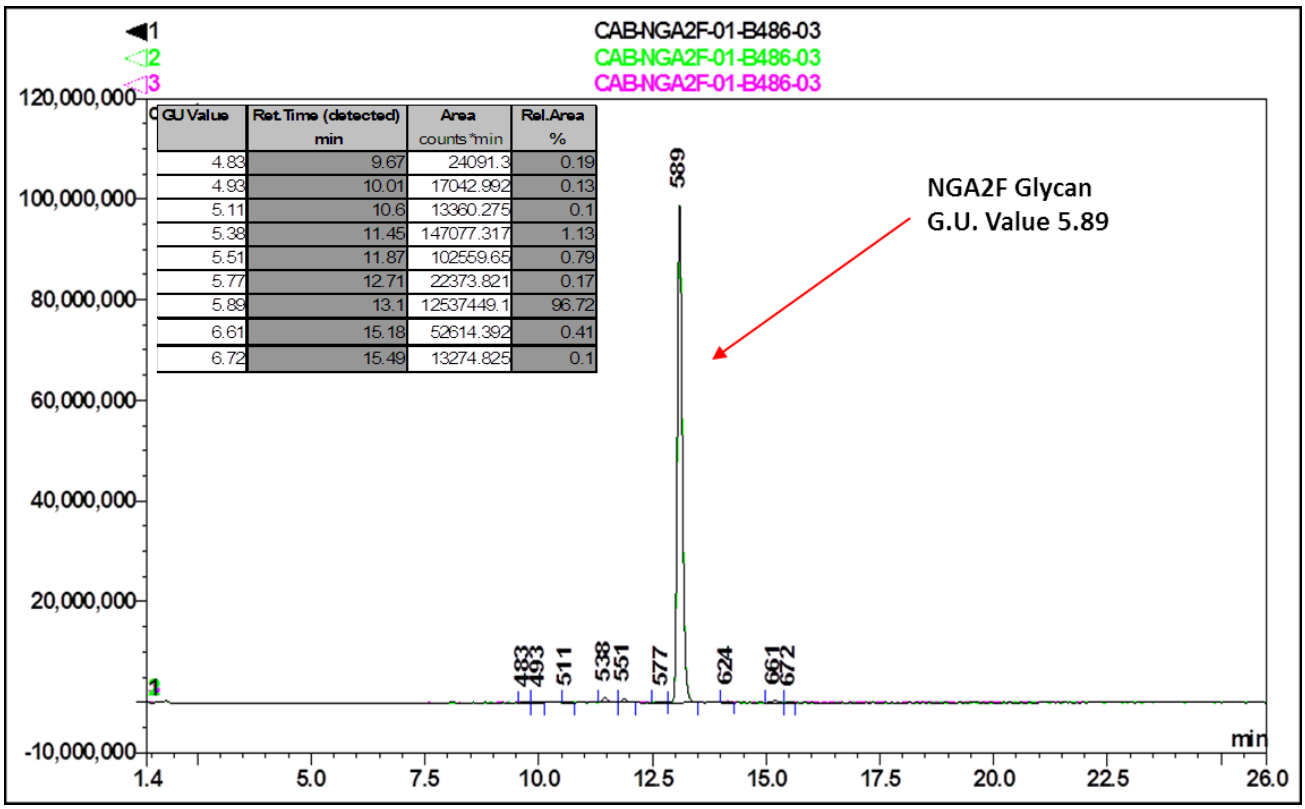


Figure 1: HILIC HPLC profile of 2AB labelled NGA2Fglycan (see method conditions below) (Cat. #: CAB-NGA2F-01, Batch B486-03).

**NGA2F 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-AB NGA2F peak seen above, eluted at 13.1 minutes, under the following conditions:

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

Flow: 0.4mL/min.

Temperature: 60 °C

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

Gradient:

Time (min)	%B
0.0	78.0
1.5	78.0
24.8	58.0
25.8	40.0
25.9	78.0
31.0	78.0

Detector: Waters FLD;Aquity Excitation wavelength: 250 nm Emission wavelength: 428 nm

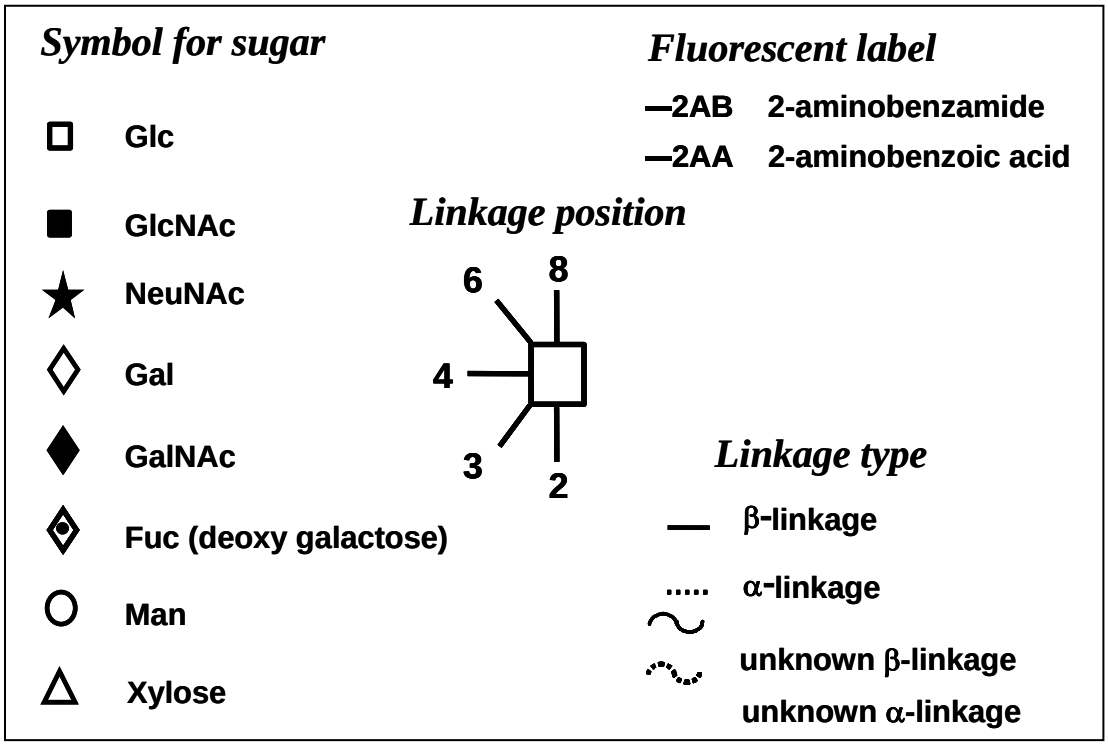


Figure 2: GlycoBase glycan structure key.