

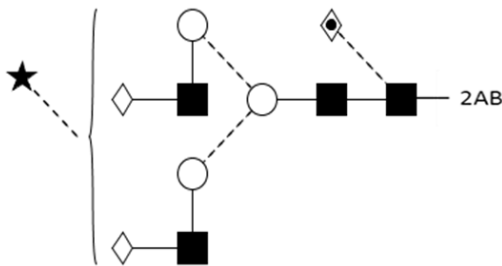
Certificate of Analysis

LudgerPure™ 2AB Labeled A1F Glycan

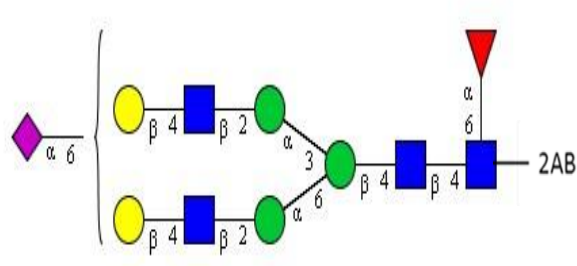
Cat. #: CAB-A1F-01
Size: approx. 100 pmol

Batch: B382-07
Expiry: 02 Aug 2018

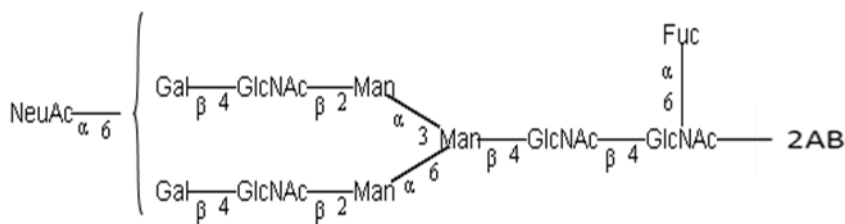
Structure



Oxford Notation



CFG Notation



Text Notation

Purity: 94.6% 2AB labeled A1F glycan, as assessed by UHPLC - see Fig 1.

Amount: Sample vial determined to contain 119.6 pmols A1F glycan – Test performed 2nd August 2013.

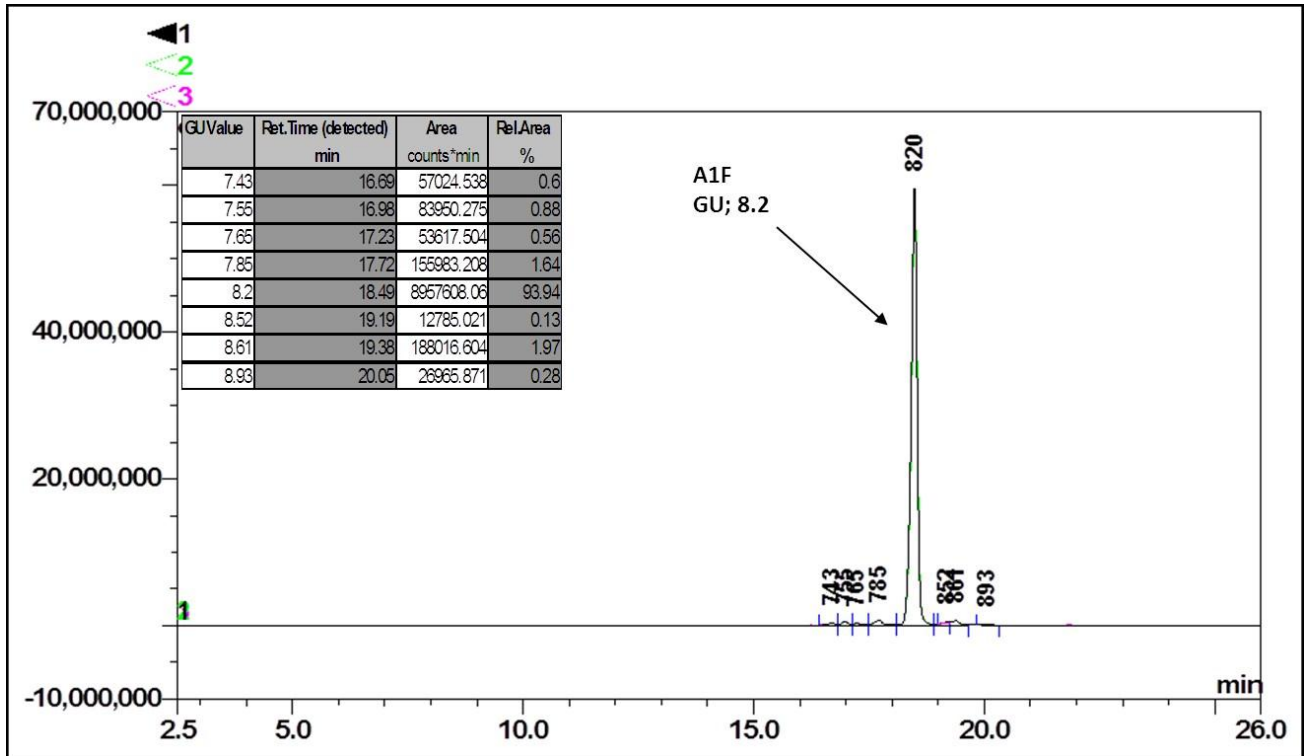


Figure 1: HILIC HPLC profile of 2AB labelled A1F glycan (see method conditions below)
(Cat. #: CAB-A1F-01, Batch B382-07).

**A1F 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 A1F peak seen above, eluted at 18.49 minutes, under the following conditions:

HPLC Running Conditions:

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

0.56mL/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: Dionex FLD-3000

Excitation wavelength: 250 nm

Emission wavelength: 428 nm

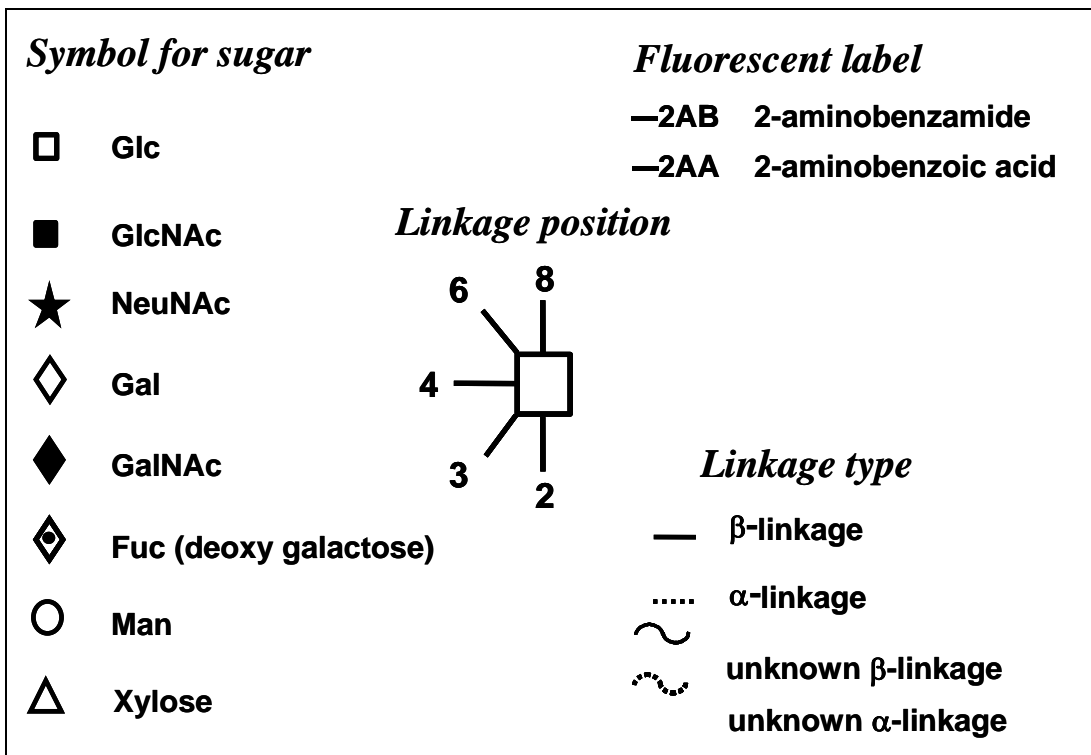


Figure 2: GlycoBase glycan structure key.