

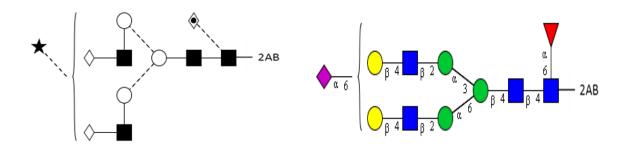
Certificate of Analysis

LudgerPure[™] 2AB Labeled A1F Glycan

Cat. #: CAB-A1F-01 Batch: B71U-03

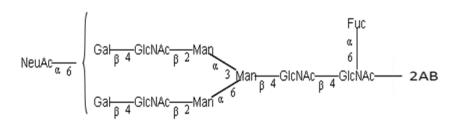
Size: approx. 100 pmol Expiry Date: 30 Jan 2022

Structure



Oxford Notation

CFG Notation



Text Notation

Purity: 88.89% 2AB labeled A1F glycan, as assessed by UHPLC - see Fig 1.

Amount: Sample vial determined to contain 115.8 pmols A1F glycan – Test performed 8th February 2017.



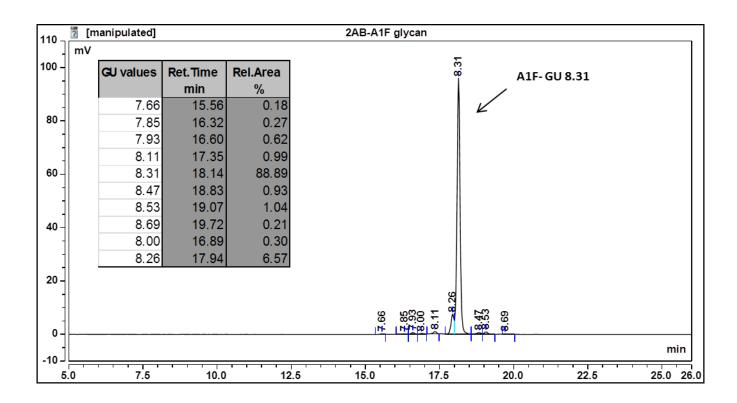


Figure 1: HILIC HPLC profile of 2AB labelled A1F glycan (see method conditions below) (Cat. #: CAB-A1F-01, Batch B71U-03).

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

<u>Detector:</u> Dionex FLD-3000 <u>Excitation wavelength:</u> 250 nm <u>Emission wavelength:</u> 428 nm

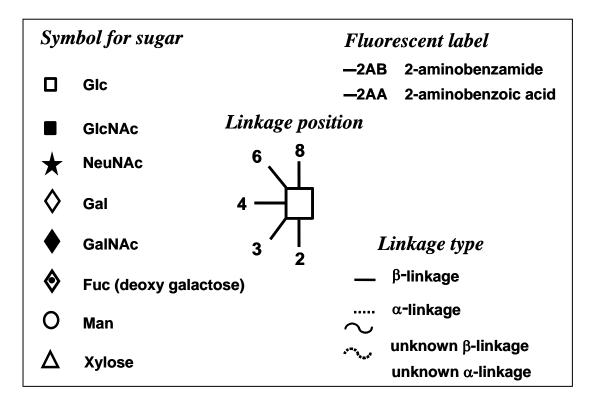


Figure 2: GlycoBase glycan structure key.