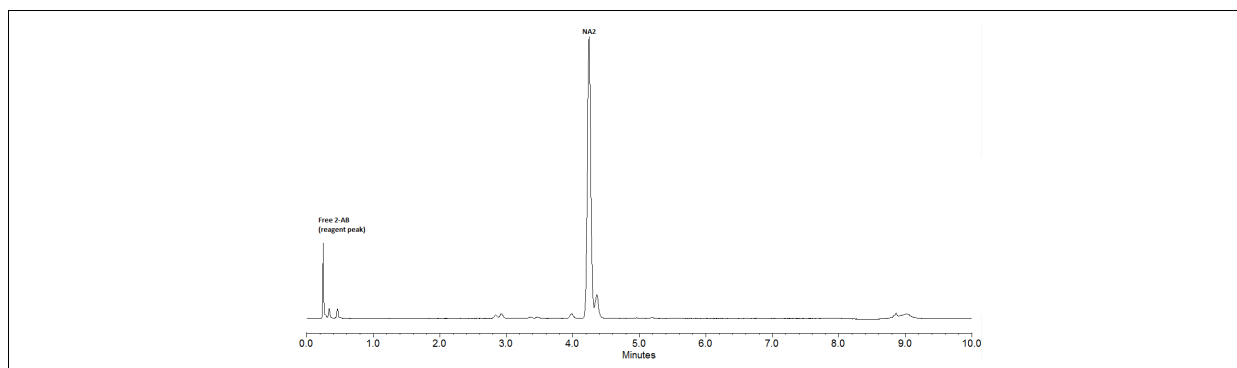




## Quality Control:



**Figure 1 - UPLC® Results:** 3 - 6 pmol (1 µl, aqueous) of the 2-AB-labeled<sup>4</sup> glycan was injected on a Waters ACQUITY UPLC® H Class System utilizing a 10-minute method under the conditions below:

Time (min)	Flow (ml/min)	% ACN	% Buffer
0	1.0	75	25
8.0	1.0	60	40
8.1	0.5	40	60
8.5	0.5	40	60
8.6	1.0	40	60
8.8	1.0	75	25
10.0	1.0	75	25

Column: Waters ACQUITY UPLC BEH Glycan Column (1.7 µm, 2.1 x 100 mm)

ACN: Acetonitrile

Buffer: 100 mM ammonium formate, pH 4.4

Flow rate: As stated in table, in ml/min

Temperature: 60°C

Max Pressure: 15,000 psi

Fluorescence Detection:  $\lambda_{\text{ex}}$  = 330 nm  
 $\lambda_{\text{em}}$  = 420 nm

**Average Mass<sup>5</sup>:** 1761.7

**Monoisotopic Mass<sup>5</sup>:** 1760.6609

**Structural Analysis:** The identity of the unlabeled glycan is confirmed by MALDI-TOF<sup>6,7</sup> or LC-MS. Agreement was found between the results from mass spectrometry and UPLC<sup>8</sup>.

### Application:

- Qualitative standard for various analytical procedures
- As a migration standard for liquid chromatography

**Handling & Reconstitution:** The labeled oligosaccharide is shipped as a dried solid. Use ultra-pure water or an aqueous buffer to dissolve the glycan (see Directions for Use for suggested volume).

Allow the unopened vial to reach ambient temperature and tap on a solid surface to ensure that most of the material is at the bottom of the vial. Gently remove the cap, add the desired volume of water or buffer, re-cap and mix thoroughly to redissolve all the oligosaccharide. For maximal recovery, ensure that the cap lining is also rinsed and centrifuge the reconstituted vial briefly before use.

Make sure that any glassware, plasticware, solvents or reagents used are free of glycosidases and carbohydrate contaminants.

Minimize exposure to elevated temperatures or extremes of pH.

Store the reconstituted glycan at -20°C. Allow the vial to equilibrate to ambient temperature before use.

**Directions For Use:** The amount of 2-AB-labeled glycan injected on a UPLC column is typically 3 - 6 pmol of total glycan. For our Quality Control testing, one vial was dissolved in 30 µl of water and 1 µl injected on the ACQUITY column. For larger injection volumes or other LC systems we recommend further dilution as necessary for compatibility with the mobile phase. For suggested methods see Rapid UPLC Methods for Screening Labeled N-Glycans (TNGP101) available at:

[www.prozyme.com/tech\\_notes.html](http://www.prozyme.com/tech_notes.html)

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<http://web.expasy.org/glycanmass/>  
The average mass of the 2-AB labeled glycan is obtained using the following formula:  
$$\text{Average Mass}_{\text{Glycan}} + \text{Average Mass}_{2\text{-AB}} (136.2) - 16$$
  
The monoisotopic mass of the 2-AB labeled glycan is obtained using the following formula (result rounded to 4 decimal places):  
$$\text{Monoisotopic Mass}_{\text{Glycan}} + 120.06875$$
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Authorized Signature