

Certificate of Analysis

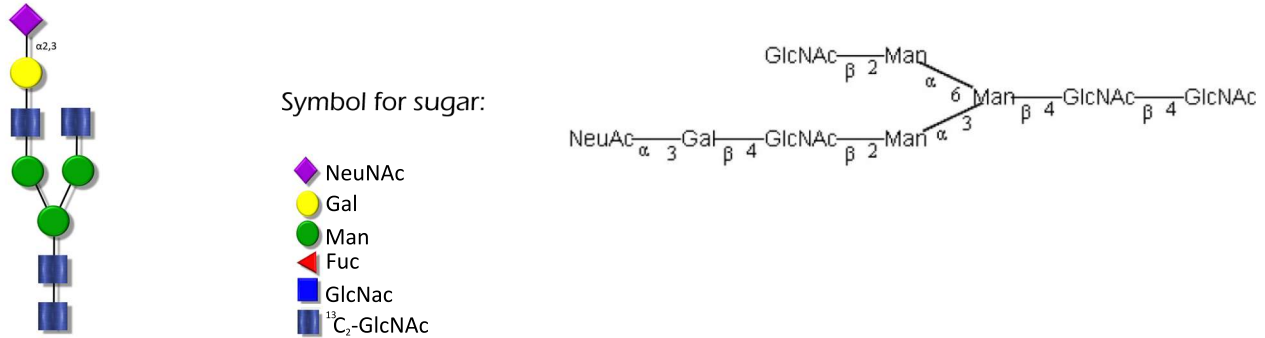
^{13}C labeled mono-(2,3)sialylated, mono-galactosylated biantennary complex N-glycan

Product code #: ILGA1(3) S23 Batch:

Alternative names:

- Di-sialylated, galactosylated, core-fucosylated bi-antennary N-linked glycan
- $^{13}\text{C}_8$ A1(3) (2,3) Glycan
- A2G1S1

Structure:



Purity: > 98% ^{13}C labeled $^{13}\text{C}_8$ A1(3) (2,3) N-glycan, as assessed by HPLC - see Fig 3.

Isotopic Enrichment Specification: $^{13}\text{C}_8$ 99.2%

Exact mass:

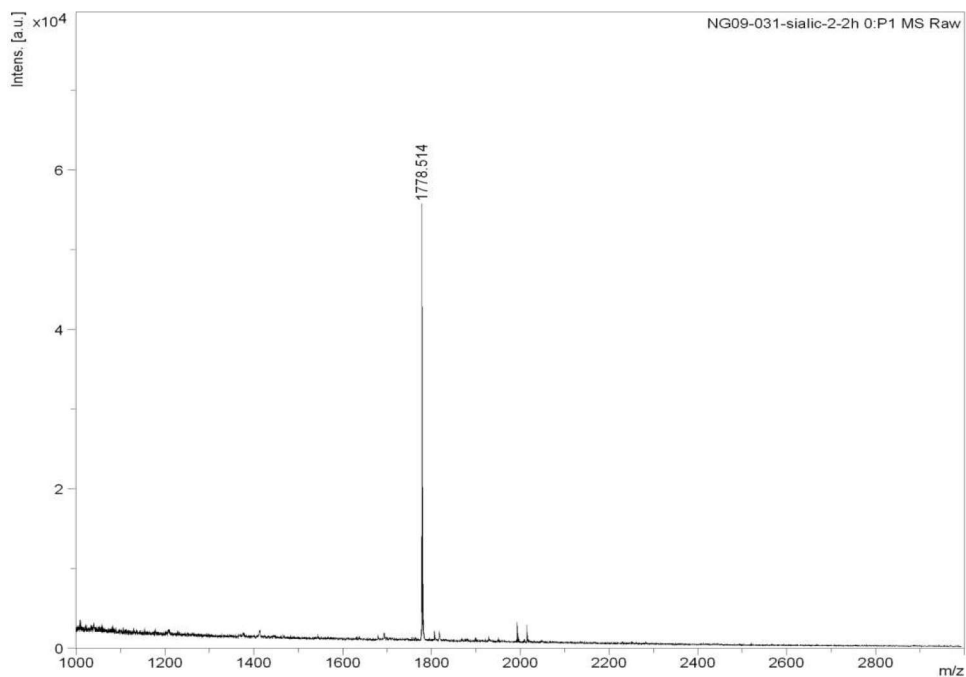


Figure 1. MALDI-TOF MS spectra (RP, DHB matrix) of lactonized $^{13}\text{C}_8$ A1(3) (2,3) N-glycan, showing only 2,3-sialylation $[\text{M}-18+\text{Na}]^+$.

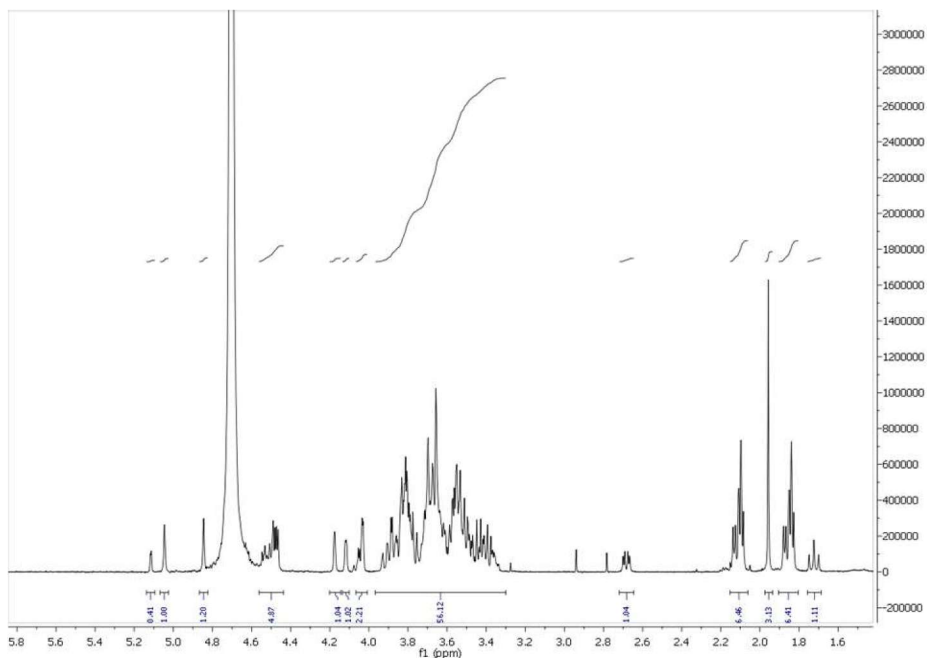


Figure 2. ^1H -NMR spectra (D_2O) of $^{13}\text{C}_8$ A1(3) (2,3) N-glycan

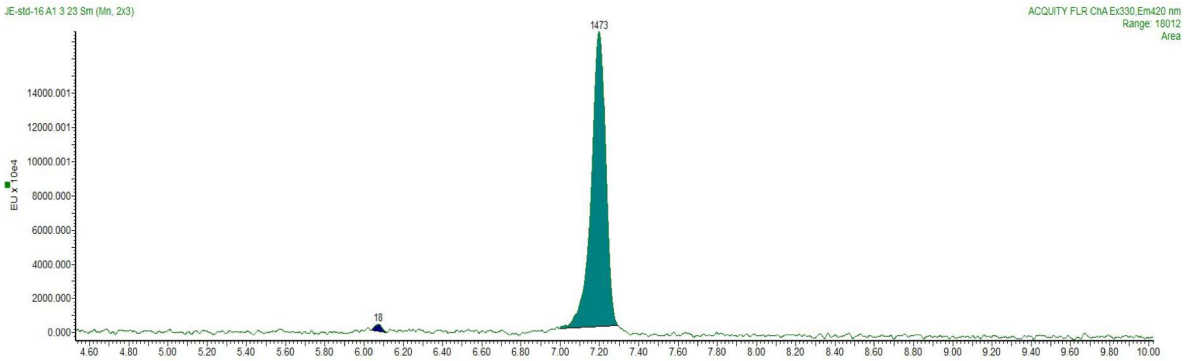


Figure 3. UHPLC profile of 2AB labeled $^{13}\text{C}_8\text{A1(3) (2,3)}$ glycan

2-AB $^{13}\text{C}_8\text{A1(3) (2,3)}$ peak seen above, eluted at 7.20 minutes, under the following conditions:

UHPLC Running Conditions:

Equipment: ACQUITY UPLC System

Column: ACQUITY UPLC Glycan BEH Amide, 100 x 2.1 mm, 1.7 μm . Waters Milford USA

Gradient:

Time (min)	Flow (mL/min)	%A	%B
Initial	0.5	22	78
12.8	0.5	44.1	55.9
13.5	0.150	100	0
17.5	0.150	100	0
18.3	0.5	22	78
20	0.5	22	78

Temperature: 60 °C

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

Excitation wavelength: 330 nm Emission wavelength: 420 nm