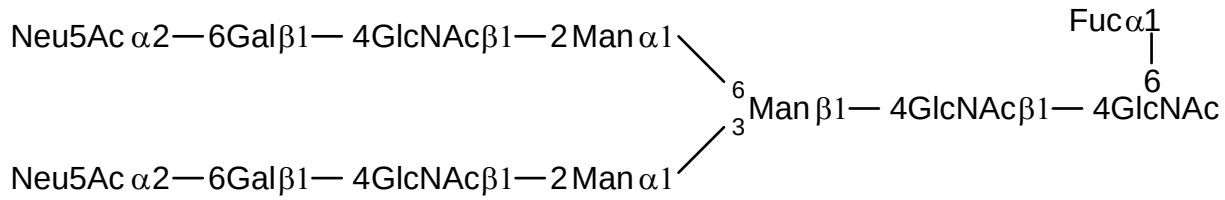
Ludger

A2F Glycan

Cat. No. CN-A2F-x (where x denotes pack size)

Structure



Synonyms : A2F N-linked oligosaccharide.

Description: Di-sialylated, core-fucosylated bi-antennary complex-type N-glycan (oligosaccharide).

Sources : A2F glycan is found on many mammalian glycoproteins including thyroglobulin, gamma globulins, and IgG. This product is typically purified from the oligosaccharide pool released from porcine thyroglobulin by hydrazinolysis using a combination of HPLC and glycosidase digestion.

Form: Dry. Dried by centrifugal evaporation from an aqueous solution. Contains ammonium salt to stabilise against desialylation.

Molecular Weight: 2370

Purity: > 90% pure as assessed by a combination of ^{1}H-NMR and HPLC.

Storage: Refridgerate (-20^{o}C) both before and after dissolution. This product is stable for at least 5 years as supplied.

Shipping: The product can be shipped at ambient when dry. After dissolution, ship on dry ice.

Handling: Allow the unopened vial to reach ambient temperature and tap unopened on a solid surface to ensure that most of the lyophilized material is at the bottom of the vial. Gently remove the cap, add the desired volume of reconstitution medium, re-cap and mix thoroughly to bring all the oligosaccharide into solution. For maximal recovery of

oligosaccharide, ensure that the cap lining is also rinsed and centrifuge the reconstituted vial briefly before use. Ensure that any glass, plasticware or solvents used are free of glycosidases and environmental carbohydrates.
Minimise exposure to elevated temperatures or extremes of pH. High temperatures and low pH will cause desialylation. High pH will cause epimerisation of the reducing terminus GlcNAc.

Safety: This product is non-hazardous and has been purified from natural sources certified to be free of all hazardous material including pathogenic biological agents.
For research use only. Not for human or drug use

Related Products

Ludger Cat. No.	**Description**
CAB-A2F-01	2-AB (2-aminobenzamide) labeled A2F glycan
CAA-A2F-01	2-AA (2-aminobenzopic acid) labeled A2F glycan
CN-A1F-x	A1F Glycan (monosialylated derivative of A2F glycan)
CN-NA2F-x	NA2F Glycan (degalactosylated derivative of A2F glycan)
CN-NGA2F-x	NGA2F Glycan (a substructure of NA2F glycan)
CN-M3N2F-x	M3N2F Glycan (a substructure of NGA2F glycan)

Warranties and liabilities

Ludger warrants that the above product conforms to the attached analytical documents. Should the product fail for reasons other than through misuse Ludger will, at its option, replace free of charge or refund the purchase price. This warranty is exclusive and Ludger makes no other warrants, expressed or implied, including any implied conditions or warranties of merchantability or fitness for any particular purpose.
Ludger shall not be liable for any incidental, consequential or contingent damages.

This product is intended for *in vitro* research only.

Document # 'CN-A2F-Guide', version 2.1

コスモ・バイオ株式会社

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Certificate of Analysis

A2F Glycan

Cat. # : CN-A2F-20U Lot # : A79I-02 Size : 20 µg

Purity: > 90% pure as assessed by a combination of HPAE-PAD (see Fig 1) and NMR (see Fig 4).

The Bulk material was checked by mass spectrometry on an Axima-QIT ion trap instrument after AA-Ac labeling and methyl esterification to stabilize the sialic acids. Expected mass of [M+H]+ ion = 2654.9 Da, observed mass = 2655.27 Da.

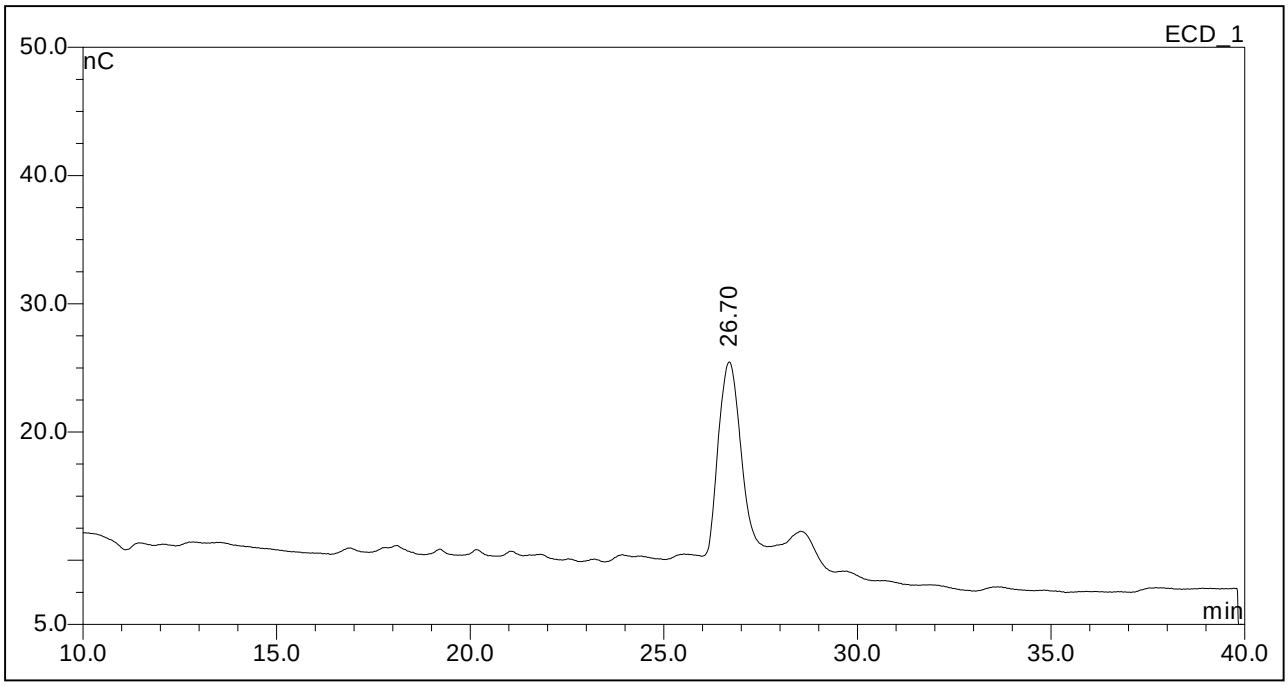

Figure 1 : HPAE-PAD HPLC Profile of A2F glycan (CN-A2F-20U, Lot A79I-02)

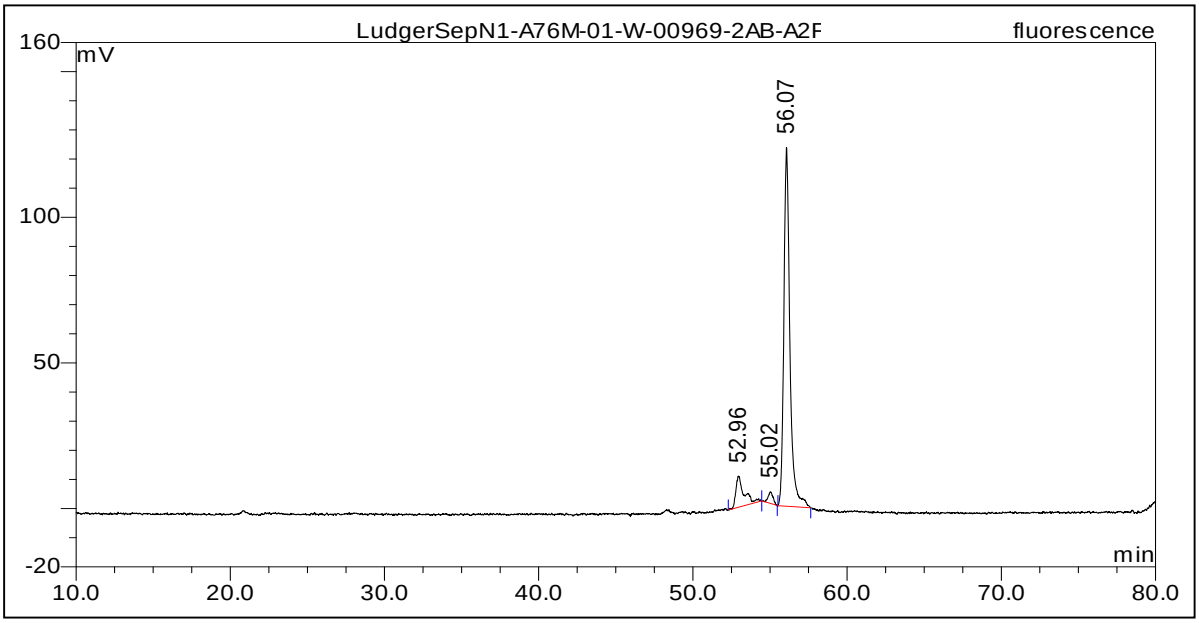

Figure 2: LudgerSep N1 HPLC profile of 2-AB labeled A2F glycan Bulk material used for A79I-02

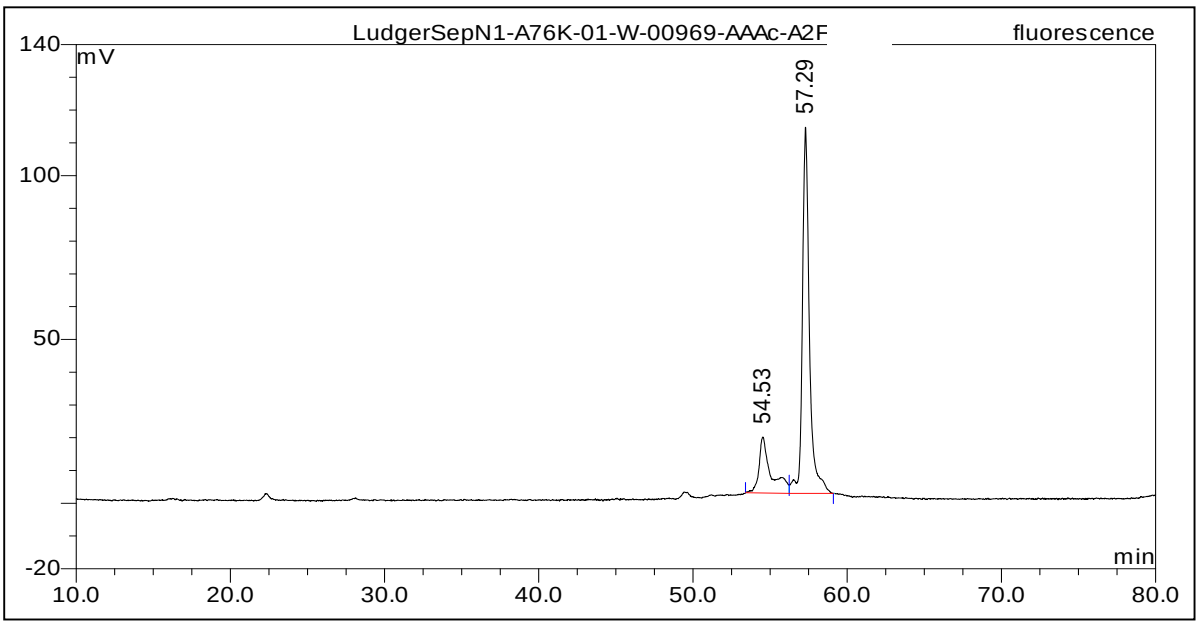

Figure 3: LudgerSep N1 HPLC profile of AAAc labeled A2F glycan Bulk material used for A79I-02

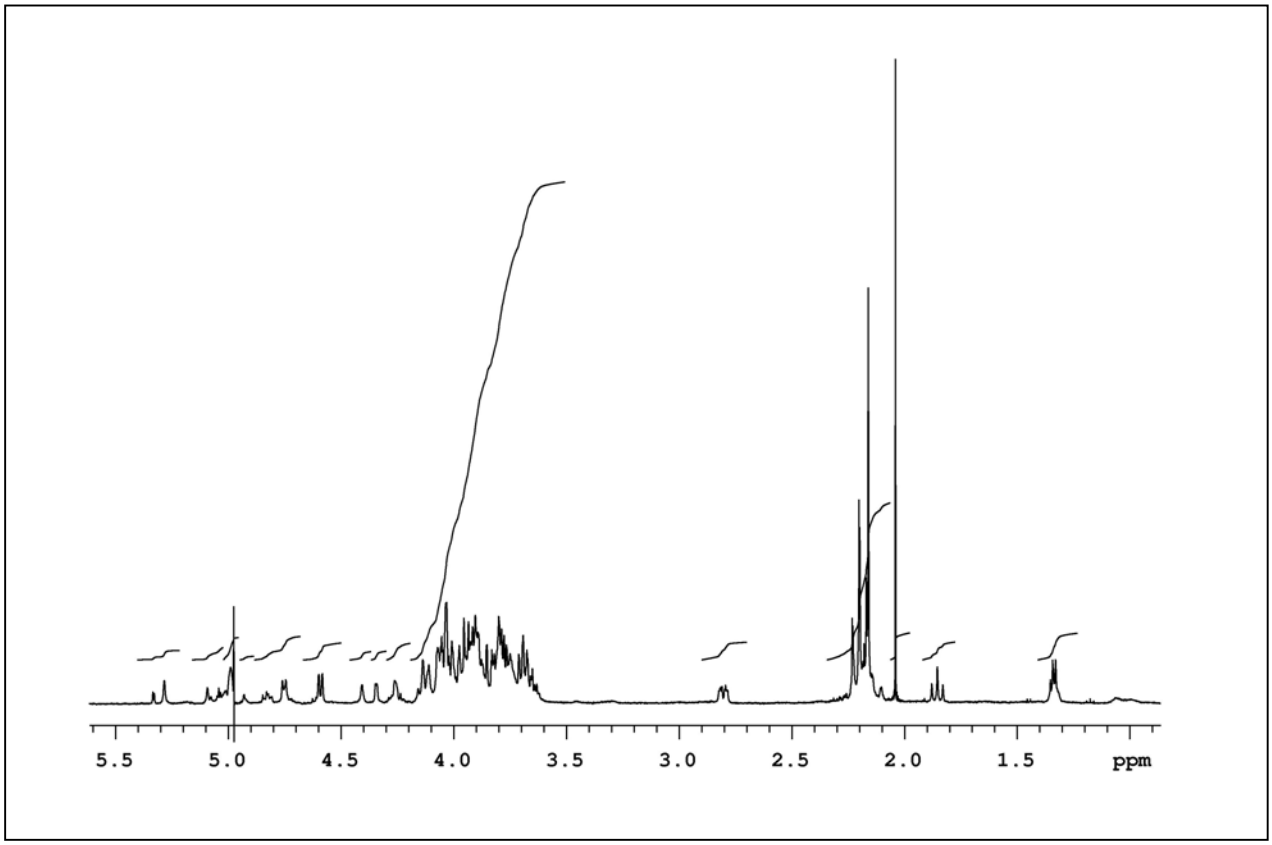

Figure 4: 500MHz ^{1}H-NMR of A2F glycan Bulk material used for A79I-02

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Certificate of Analysis

A2F Glycan

Cat. #s : CN-A2F-10U (10 µg) and CN-A2F-20U (20 µg) Lot # : A7A4-02

Purity: > 90% pure as assessed by a combination of HPAE-PAD (see Fig 1) and NMR (see Fig 4).

The Bulk material was checked by mass spectrometry on an Axima-QIT ion trap instrument after AA-Ac labeling and methyl esterification to stabilize the sialic acids. Expected mass of [M+H]+ ion = 2654.9 Da, observed mass = 2655.27 Da.

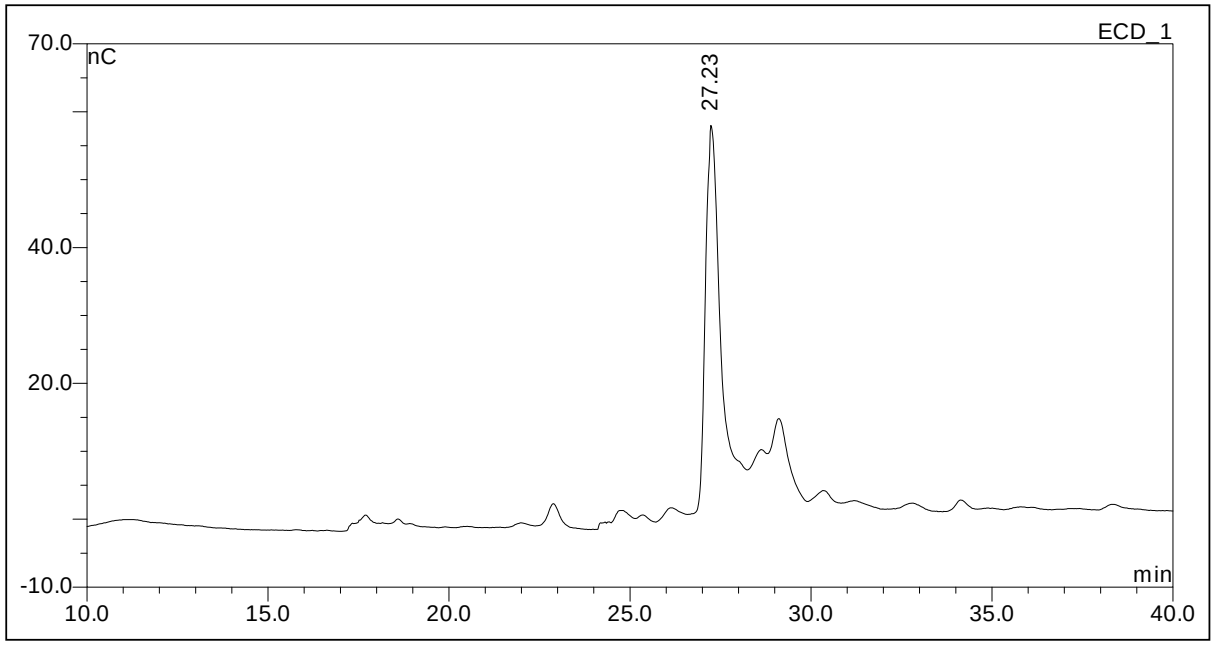

Figure 1 : HPAE-PAD HPLC Profile of A2F glycan (CN-A2F-10U, Lot A7A4-02)

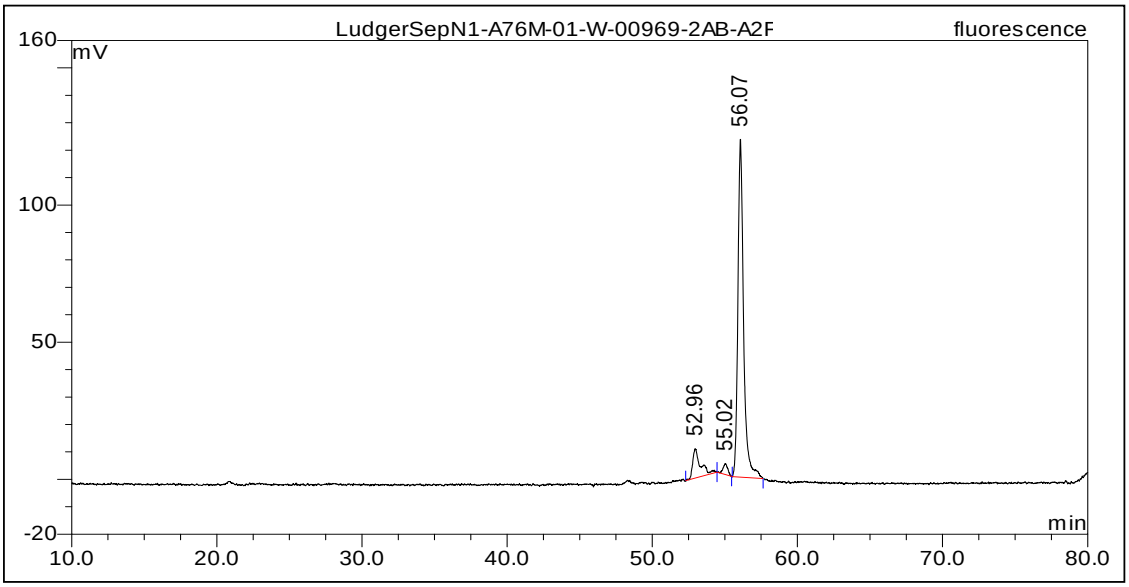

Figure 2: LudgerSep N1 HPLC profile of 2-AB labeled A2F glycan Bulk material used for A7A4-02

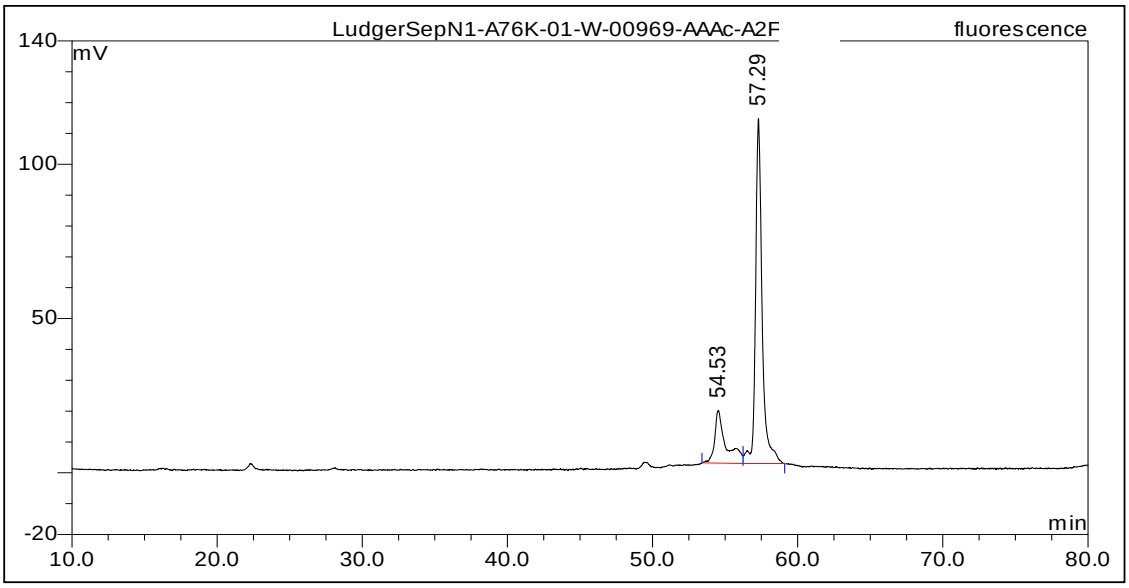

Figure 3: LudgerSep N1 HPLC profile of AAAc labeled A2F glycan Bulk material used for A7A4-02

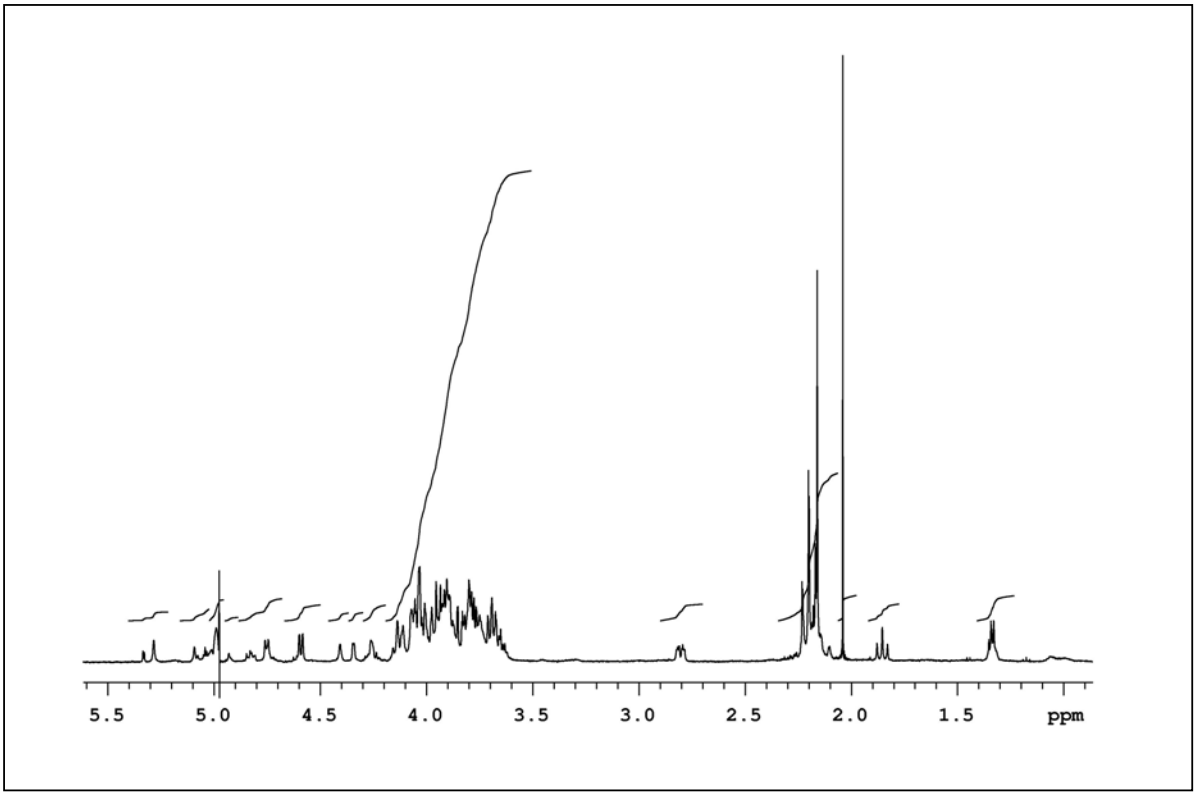

Figure 4: 500MHz ^{1}H-NMR of A2F glycan Bulk material used for A7A4-02

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Certificate of Analysis

A2F Glycan

Cat. #s: CN-A2F-10U (10 µg) and CN-A2F-20U (20 µg) Lot # : A826-01

Purity: > 90% pure as assessed by a combination of HPAE-PAD (see Fig 1) and NMR (see Fig 2).

The Bulk material was checked by mass spectrometry on an Axima-QIT ion trap instrument after AA-Ac labeling and methyl esterification to stabilize the sialic acids. Expected mass of [M+H]+ ion = 2654.9 Da, observed mass = 2655.27 Da.

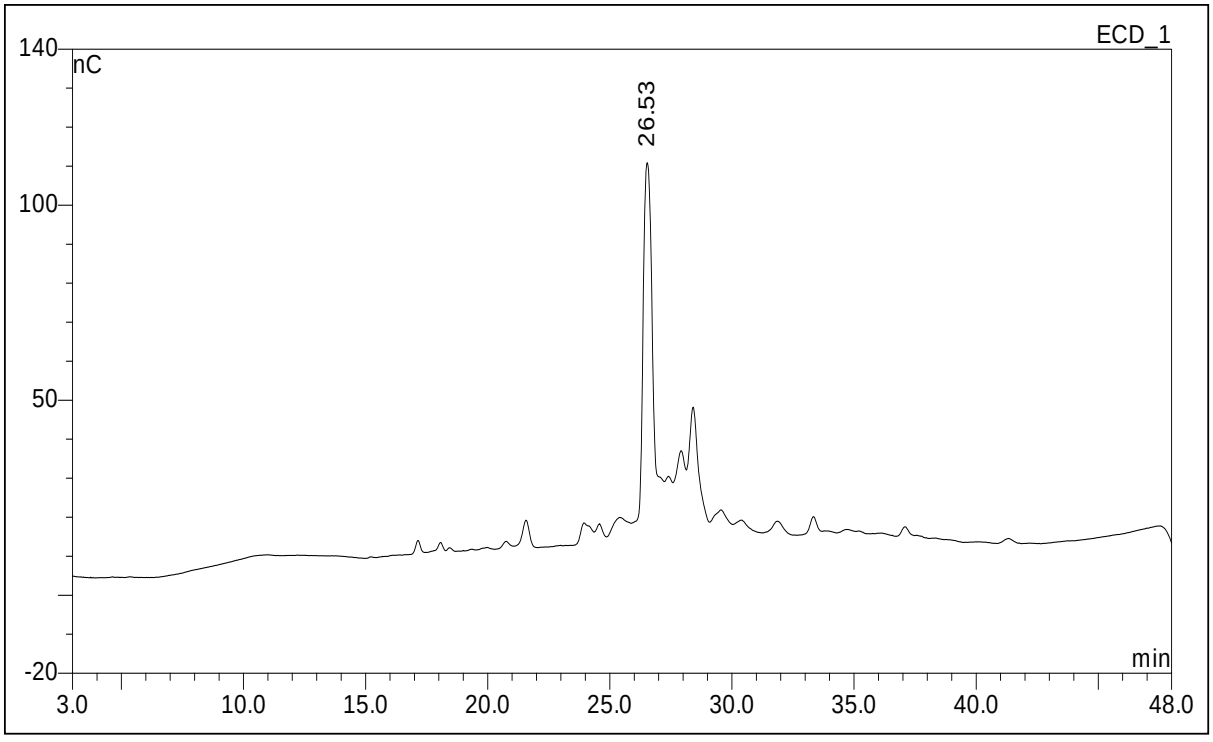

Figure 1 : HPAE-PAD Profile of A2F glycan (CN-A2F-10U, Lot A826-01)

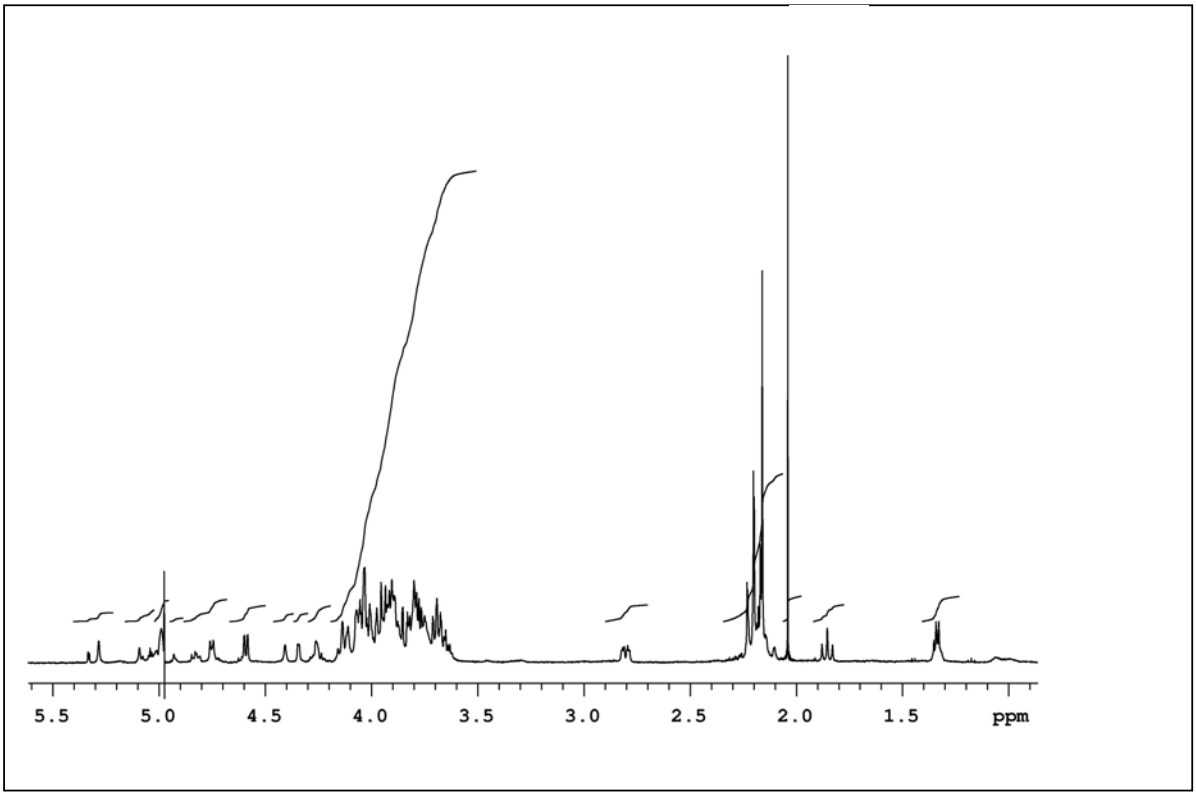

Figure 2: 500MHz ^{1}H-NMR of A2F glycan Bulk material used for A826-01.