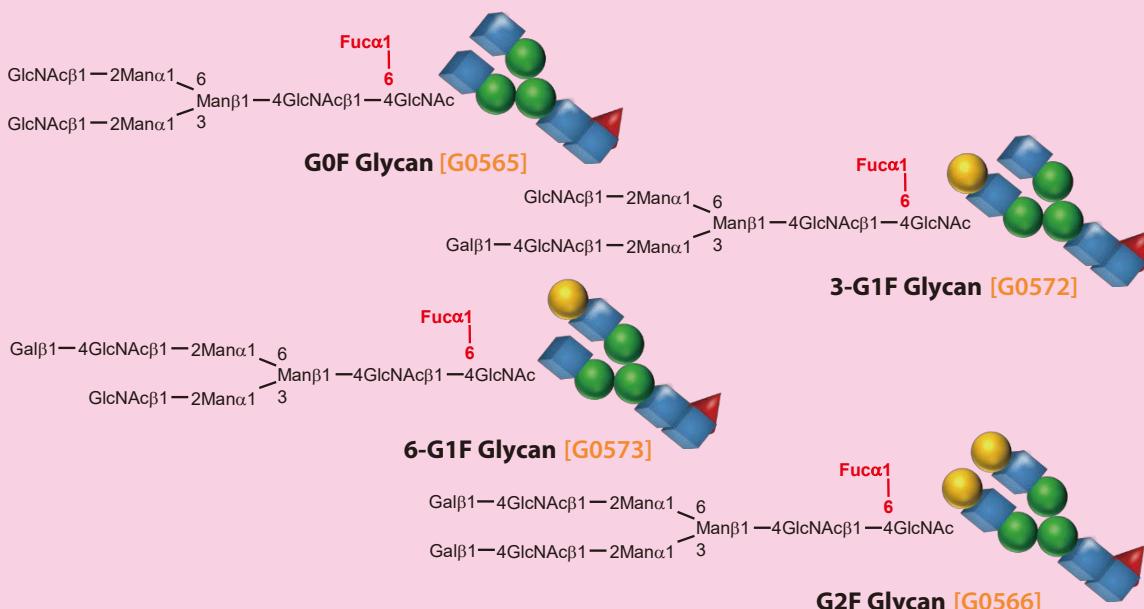


Core-fucosylated N-Glycan and Labeled Core-fucosylated N-Glycan based on Chemical Synthesis

Core-fucosylated N-Glycan

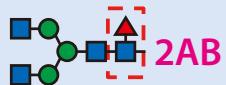
Our chemical synthesis of oligosaccharide using various sugar building blocks provides human type N-glycans (G0, uniform isomers 3-G1 and 6-G1, and G2) with a core fucose bound to a position 6 of the reducing terminal β -N-acetylglucosamine.



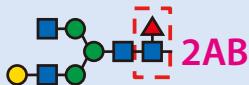
Labeled Core-fucosylated N-Glycan

We produce high grade 2-AB labeled core-fucosylated N-glycans. Please take advantage of our fluorescent-labeled products as a standard glycan for MS, CE and HPLC analyses of biopharmaceuticals including antibody drugs.

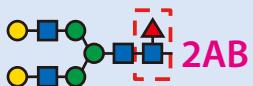
G0F 2AB [G0561]



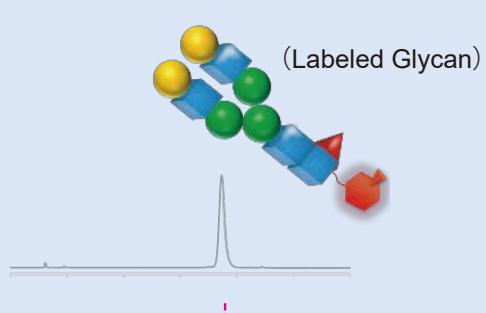
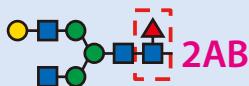
3-G1F 2AB [G0562]



G2F 2AB [G0564]



6-G1F 2AB [G0563]



<Analysis of Biological Samples>

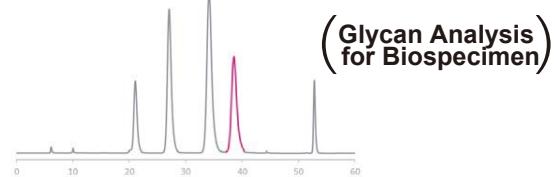
Cell, Biopharmaceutical, etc.

Extract

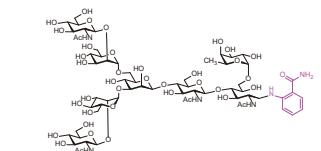
Label

Analysis

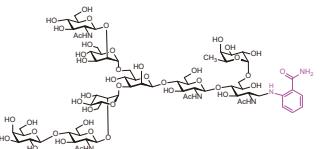
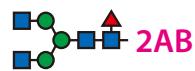
Analysis Sample



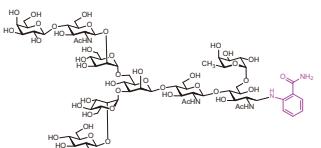
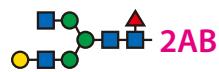
Core-fucosylated N-Glycan a



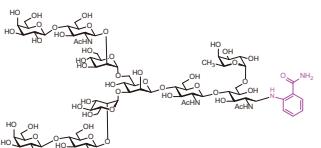
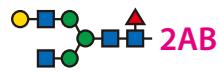
G0F 2AB [G0561]



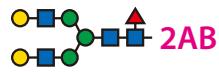
3-G1F 2AB [G0562]



6-G1F 2AB [G0563]

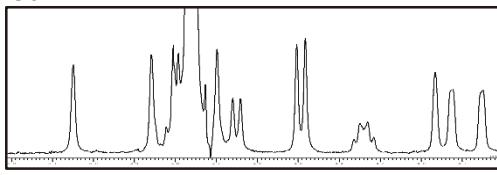


G2F 2AB [G0564]

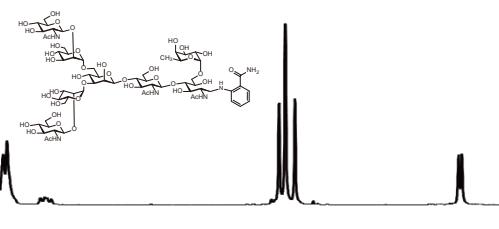


NMR Data of Labeled Core-fucosylated N-Glycan

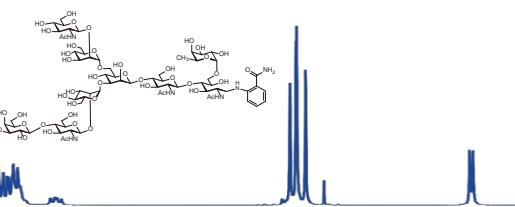
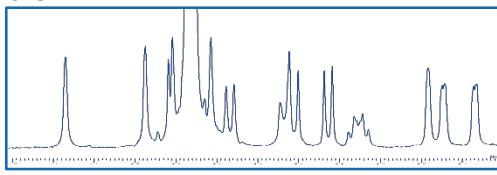
G0F 2AB



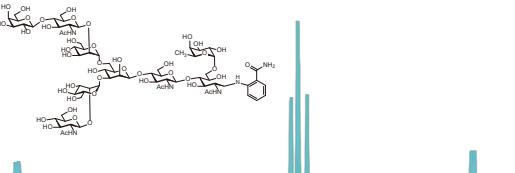
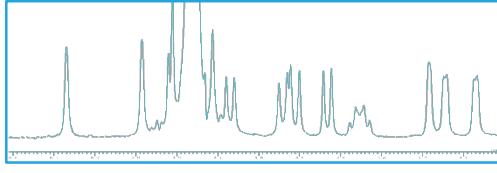
¹H NMR JEOL Ltd.
[Solvent] D₂O



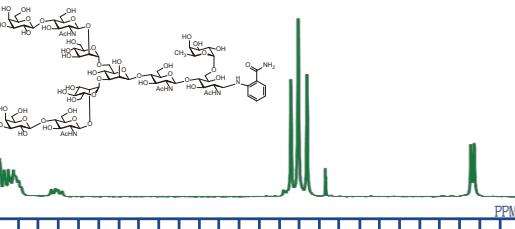
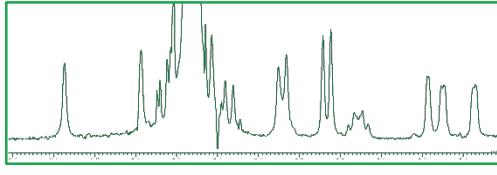
3-G1F 2AB



6-G1F 2AB



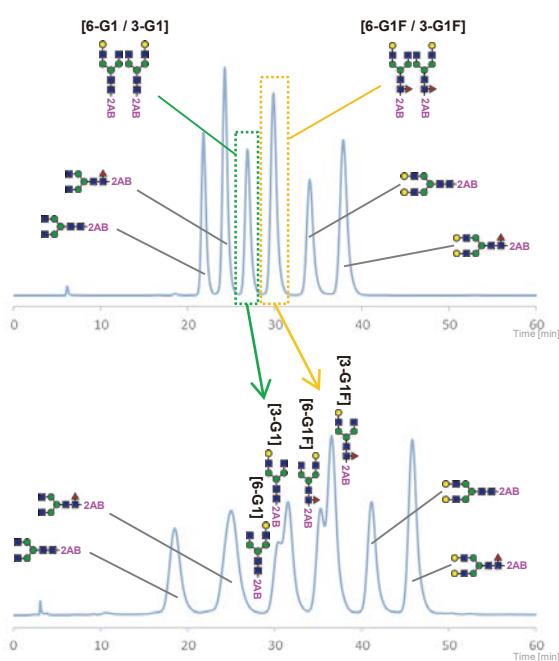
G2F 2AB



PPM

Labeled Core-fucosylated N-Glycan based on Chemical Synthesis

a



[Column] Asahipak NH2P-50 4E ($\Phi 4.6 \times 250$ mm)

[Detection] FL (Ex: 330 nm, Em: 420 nm)

[Temp.] 40°C

[Solvent] A : Acetonitrile B : 50 mM Ammonium formate (pH4.4)

(a)

[Inject] Each 20 pmol of G0F 2AB, G1F 2AB and G2F 2AB
Each 10 pmol of G0 2AB, G1 2AB and G2 2AB

[Condition] 0~60 min B:35%

[Flow rate] 0.5 mL/min

(b)

[Inject] Each 10 pmol of G0F 2AB, 3-G1F 2AB and G2F 2AB
Each 5 pmol of G0 2AB, 3-G1 2AB, 6-G1F 2AB and G2 2AB
2.5 pmol of 6-G1 2AB

[Condition] 0~10 min B:35%

10~50 min B:35%—(gradient)—> 40%

50~60 min B:35%

[Flow rate] 1.0 mL/min

0.25 mL/min

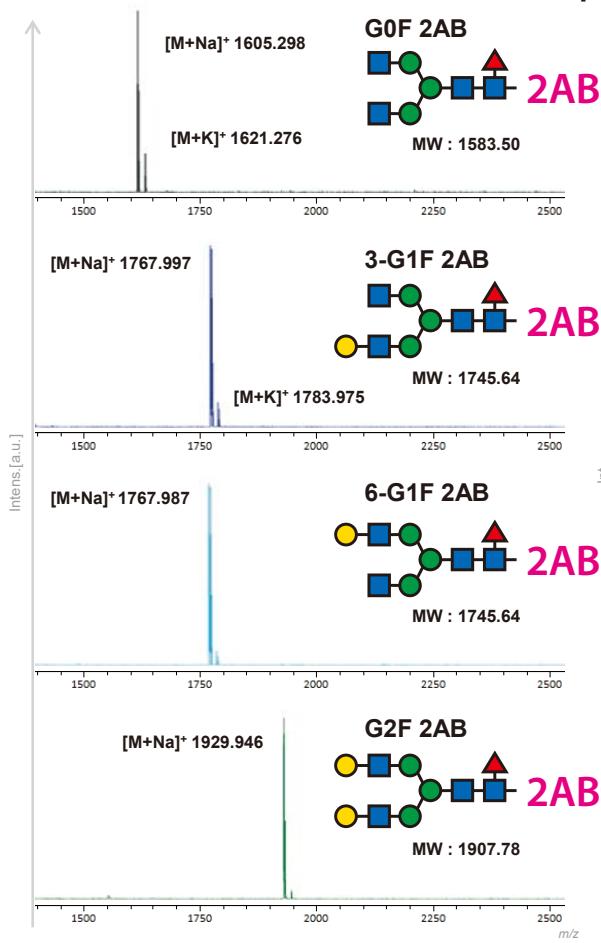
1.0 mL/min

(a) The labeled N-glycan mixture was separated based on the distinctive features of glycan structure. (However, G1 and G1F isomers were not individually separated.)

(b) The G1 isomers (3-G1 and 6-G1) and G1F isomers (3-G1F and 6-G1F) are modestly detached in this condition.

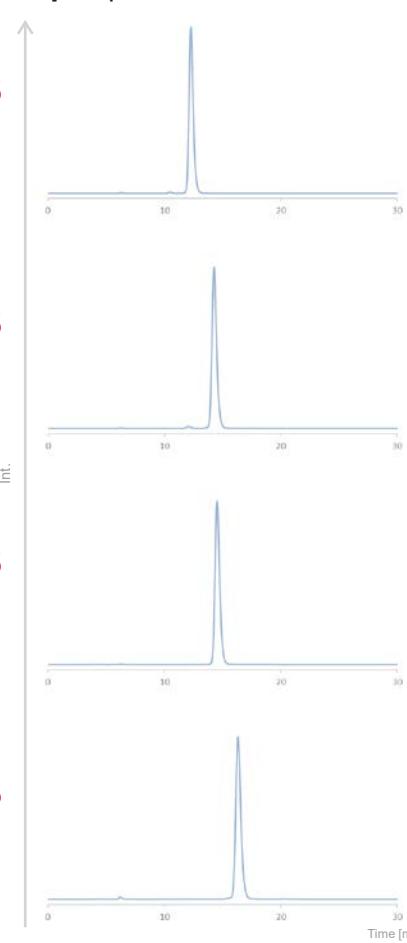
MS / HPLC Data of Labeled Core-fucosylated N-Glycan

MALDI-TOF-MS Bruker DaltonicsK.K.
[Mode] Positive mode



HPLC Hitachi Hightech
[Detection] FL (Ex: 330 nm, Em: 420 nm)
[Column] Asahipak NH2P-50 4E (4.6 × 250 mm)

HPLC purity > 95%



Core-fucosylated N-Glycan and Labeled Core-fucosylated N-Glycan based on Chemical Synthesis

Labeled Core-fucosylated N-Glycan

G0F 2AB	[G0561]
3-G1F 2AB	[G0562]
6-G1F 2AB	[G0563]
G2F 2AB	[G0564]

Each packing unit is 500pmol/vial

Core-fucosylated N-Glycan

G0F Glycan	[G0565]
3-G1F Glycan	[G0572]
6-G1F Glycan	[G0573]
G2F Glycan	[G0566]

Please contact us

Related Products

Labeled N-Glycan

G0 2AB
3-G1 2AB
6-G1 2AB
G2 2AB
Neu5A α (2-6) N-Glycan 2AB
Neu5G α (2-6) N-Glycan 2AB
Gal α (1-3) N-Glycan 2AB

Each packing unit is 500pmol/vial

N-Glycan

[G0490] G0 Glycan	[G0484]
[G0491] 3-G1 Glycan	[G0485]
[G0492] 6-G1 Glycan	[G0486]
[G0493] G2 Glycan	[G0487]
[N1073] Neu5A α (2-6) N-Glycan	[N1065]
[N1075] Neu5G α (2-6) N-Glycan	[N1064]
[G0494] Gal α (1-3) N-Glycan	[G0488]

Please contact us

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