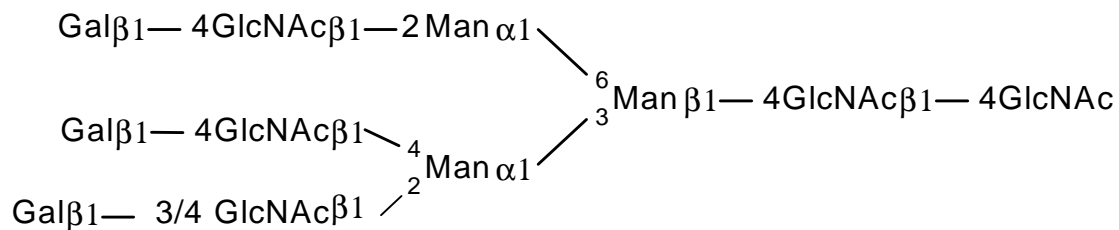


# Ludger™

## NA3 Glycan

CN-NA3-x (where x denotes pack size)

### Structure



**Synonyms :** NA3 N-linked oligosaccharide.

**Description:** Asialo-, tri-antennary complex-type N-glycan (oligosaccharide). NA3 is a the asialo-substructure of A3 glycan. The product provided may be a mixture of isomers differing in the linkage of the Gal residue of one of the glycan's antennae (please see the product certificate of analysis for lot specific details on the isomers provided). The different Gal linkages in NA3 are described in detail in the notes below.

**Sources :** NA3 glyans are found on several mammalian glycoproteins including bovine serum fetuin (bSF). This product is typically purified from the oligosaccharide pool released from bSF by hydrazinolysis using a combination of HPLC and glycosidase digestion.

**Form:** Dry. Dried by centrifugal evaporation from an aqueous solution.

**Molecular Weight:** 2007

**Purity:** > 90% pure as assessed by a combination of <sup>1</sup>H-NMR and HPLC.

**Storage:** Refrigerate (-20°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

## Ludger

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.

**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	Description	Cat. No.
CN-A3-x	A3 Glycan (trisialylated parent of NA3 glycan)	
CN-NGA3-x	NGA3 Glycan (a substructure of NA3 glycan)	
CN-M3N2-x	M3N2 Glycan (a substructure of NGA3 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 warranties, 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.

Revised: 07.June.2001

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## Certificate of Analysis

### NA3 Glycan

Cat. # : CN-NA3-20U

Lot # : A33D-05

Size : 20 µg

**Purity:** > 90% pure as assessed by a combination of <sup>1</sup>H-NMR (see Fig 1) and HPLC.

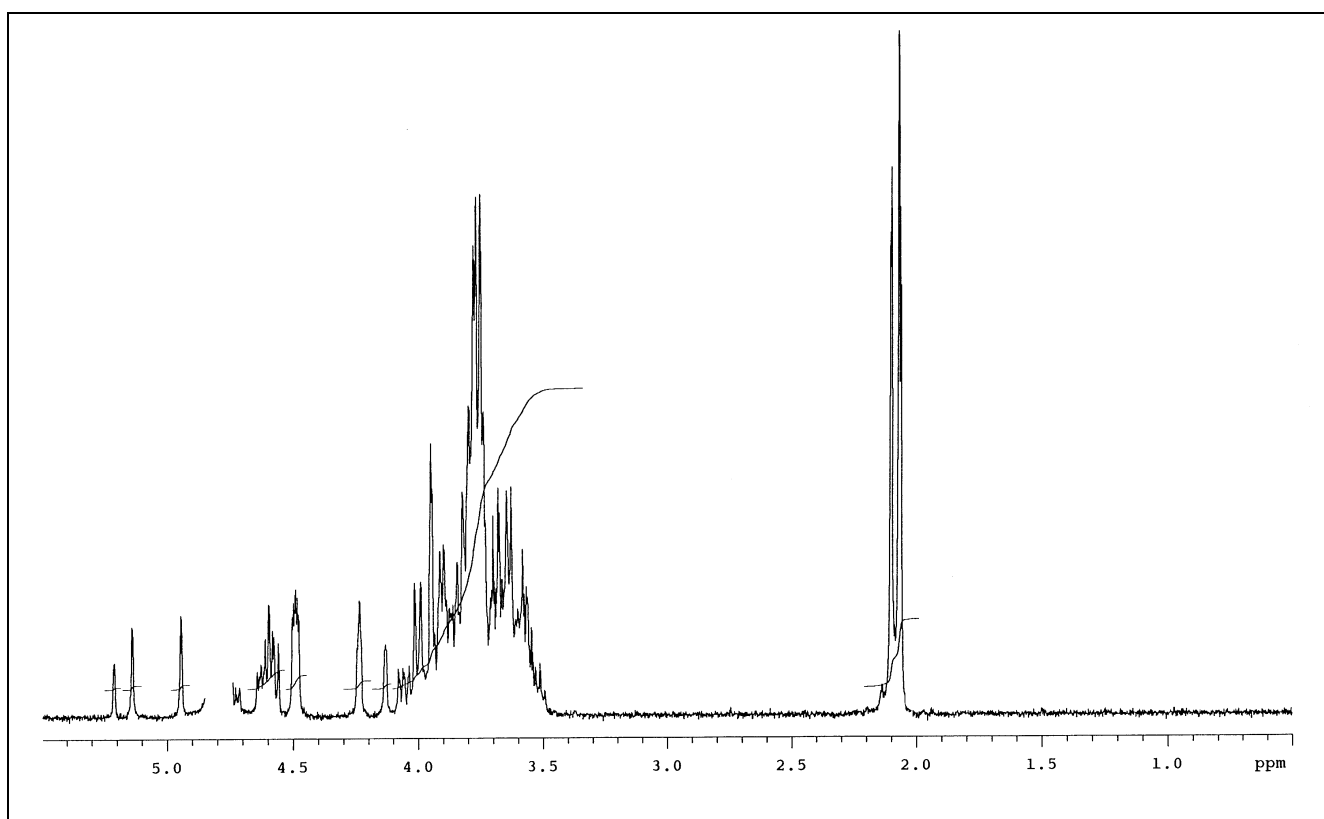


Figure 1 : 500 MHz <sup>1</sup>H-NMR of NA3 Glycan (Cat. No.CN-NA3-20U, Lot No. A33D-05)



## Certificate of Analysis

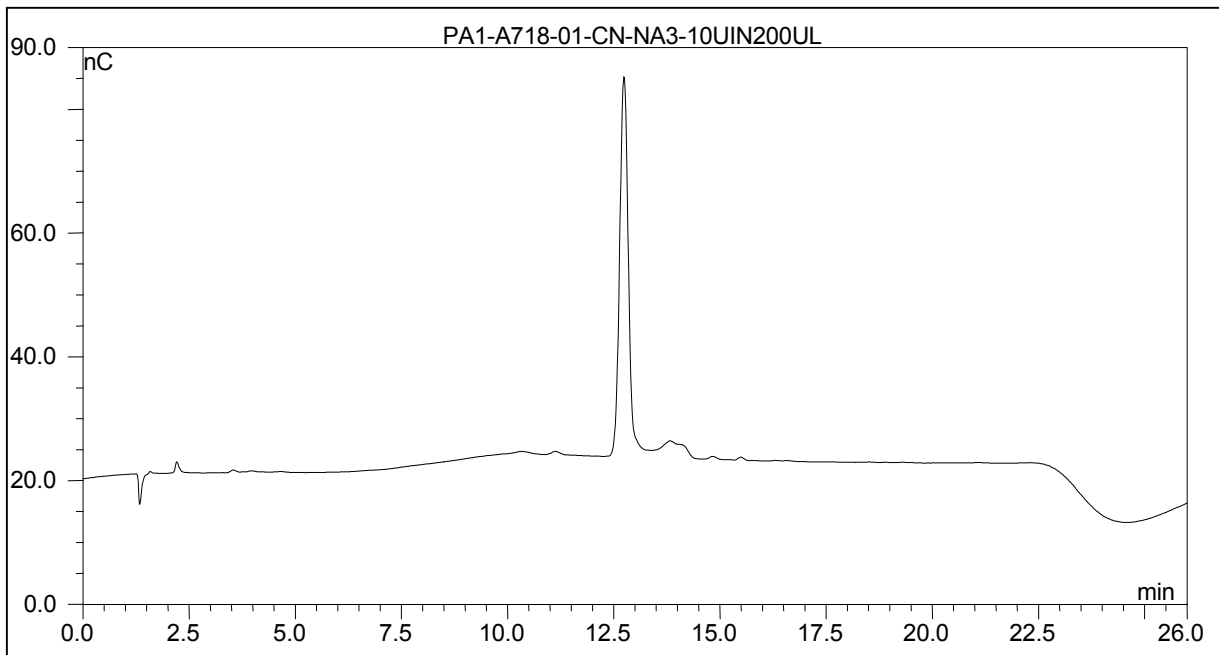
### NA3 Glycan

Cat. # : CN-NA3-10U

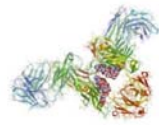
Lot # : A68T-03

Size : 10 µg

**Purity:** > 90% pure as assessed by a combination of HPAE-PAD (see Fig 1), HPLC (see Fig 2) and MS (see Fig 3).



**Figure 1 : HPAE-PAD Profile of NA3 Glycan (Cat. No.CN-NA3-10U, Lot No. A68T-03)**



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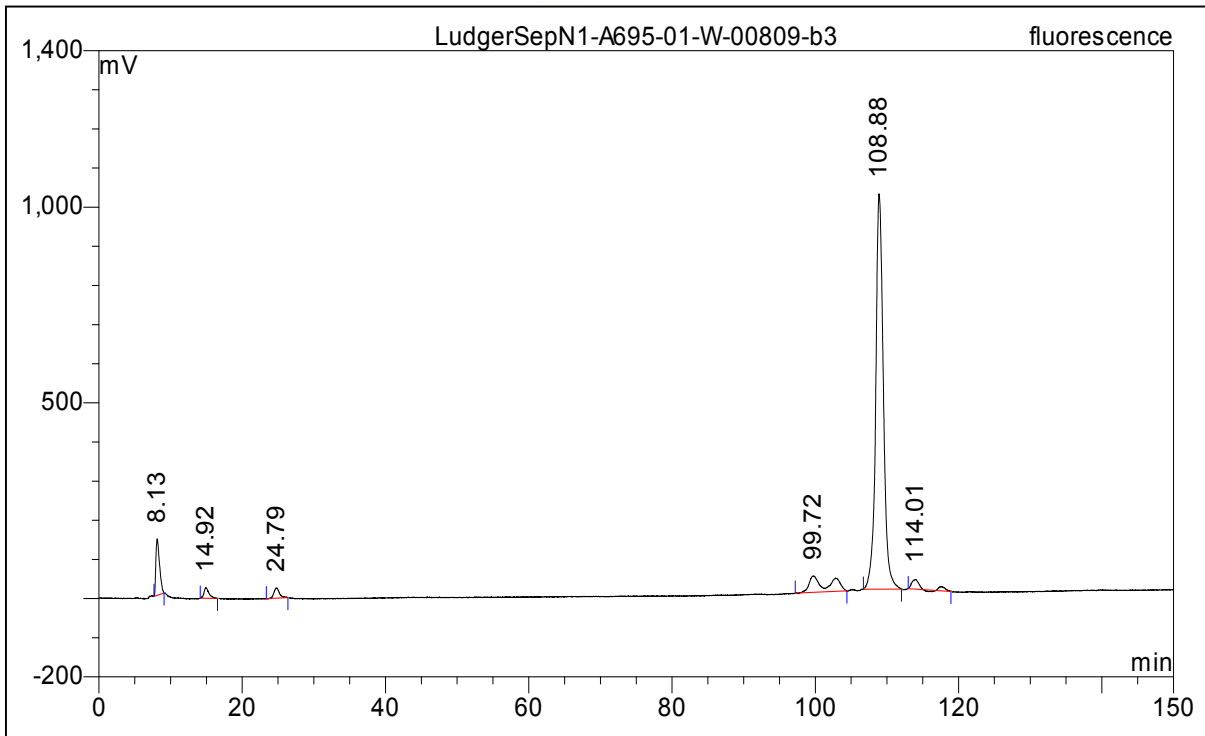


Figure 2 : HPLC Profile of NA3 Glycan (Cat. No.CN-NA3-10U, Lot No. A68T-03)

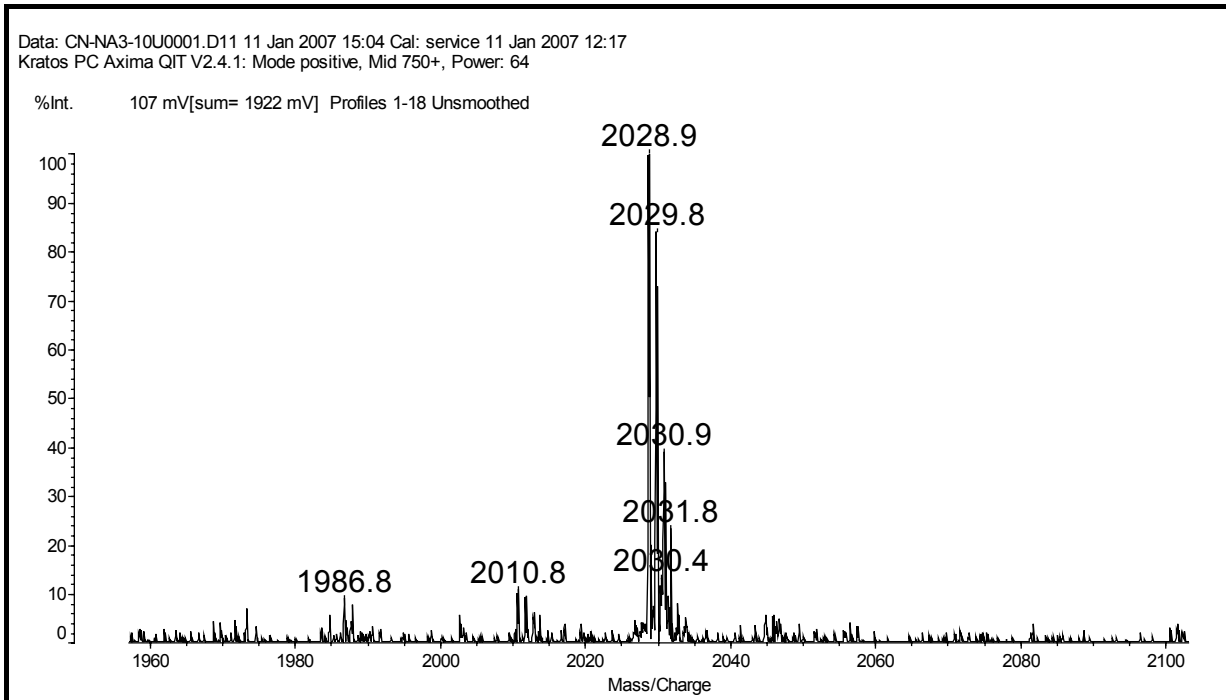


Figure 3 : MS of NA3 Glycan (Cat. No.CN-NA3-10U, Lot No. A68T-03)