



Certificate of Analysis

LudgerPure™ Glycan Library from Porcine Fibrinogen

Cat. #: CLIB-PFibrinogen-01

Lot #: A5AO-06

Size: 20 µg

Description: A2F family N-glycans released from porcine fibrinogen by hydrazinolysis. The two main glycan components are di-sialylated and mono-sialylated core-fucosylated, bi-antennary glycans A2F and A1F.

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

Main Species: A2F (mol. wt. 2370) and A1F (mol. wt. 2079).

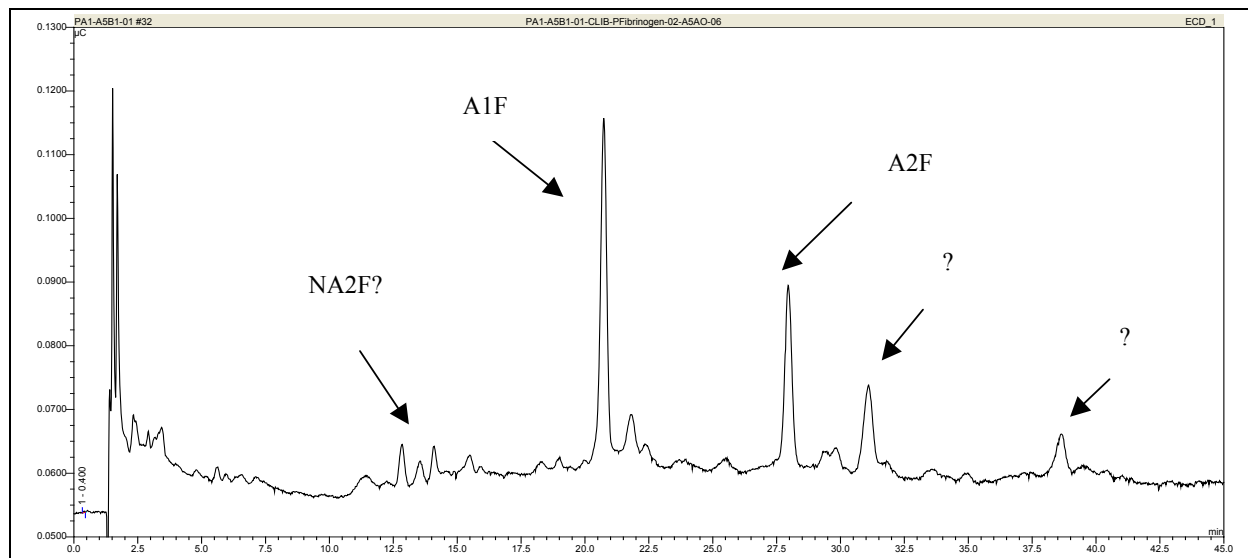


Figure 1: HPAE-PAD HPLC Profile of A2F Family Glycans from porcine fibrinogen (Cat. #: CLIB-PFibrinogen-01)

HPLC Running Conditions

Column: Dionex PA1 carb

Flow: 1 ml/min

Temperature: 30 °C.

Solvent A: 100 mM sodium hydroxide

Solvent B: 1 M sodium acetate in 100 mM sodium hydroxide

Gradient: 0-3 min - 2 % B

3-45 min - 2-25 % B

Detector: ED40 electrochemical detector

Glycan Information

A2F family biantennary glycans with core $\alpha(1-6)$ fucosylation (A2F, A1F, NA2F, and NGA2F) are naturally found as N-linked oligosaccharides conjugated to a wide range of glycoproteins including IgG from several mammalian species [Hamako et al (1993)], porcine vitronectin [Yoneda et al (1993)], porcine thyroglobulin [Charlwood et al (1999)], seminal plasma spermadhesin [Nimtz et al (1999)], and recombinant glycoproteins expressed in mammalian cell lines [Sato et al (1999)]. The truncated core structure M3N2F is also found in glycoproteins of insects and recombinant mammalian glycoproteins expressed in insect cells [Voss et al (1993)]. The structures and possible roles of fucosylated glycans are reviewed by Staudacher et al (1999).

Core $\alpha(1-6)$ fucosylation of glycoprotein glycans is an important process in a number of normal and aberrant biological processes including cell adhesion, neurogenesis, the development and cancers, the natural suppression of cancer metastases, and liver diseases.

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