

PA-Sugar Chain 034

(GD1b-hexasaccharide)

Code No. 4134

Size: 500 pmol

Shipping at -20°C

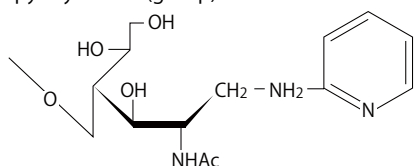
Store at -20°C

Structure

Gal β 1-3GalNAc β 1-4Gal β 1-4Glc-PA

Neu5Ac α 2-8Neu5Ac α 2³

PA : pyridylamino (group) structure shown below



Concentration: 10 pmol/ μl (quantified by GC)

Form: Frozen solution (in 50 μl of 10 mM NH_4HCO_3)

Purity: More than 95% by HPLC

Storage: -20°C

* 2 years from date of receipt under proper storage conditions.

Preparation:

The method described by Kondo, *et al.*¹⁾ is modified for the preparation.

Properties:

- PA-sugar chains are detectable with only 0.03 picomoles of amounts due to their fluorescence of the pyridylamino (PA) group.
- PA-sugar chains can be well separated and analyzed by reversed-phase HPLC utilizing the hydrophobic property of the PA group.
- Fluorescence of PA-sugar chains are stable in light and severe conditions such as acid or alkaline hydrolysis, hydrazinolysis, Smith-degradation, partial acetolysis, methylation analysis, etc.
- Structure is confirmed by $^1\text{H-NMR}$.
- Quantified by GC.

Reference:

- 1) Kondo A, Suzuki J, Kuraya N, Hase S, Kato I, and Ikenaka T. *Agric Bio Chem.* (1990) **54**: 2169-2170.

● **濃度** 10 pmol/ μl (GC にて¹⁾)

● **形状** 溶液凍結品 (10 mM 重炭酸アンモニウム溶液 50 μl 中)

● **純度** HPLC にて 95%以上

● **保存** -20°C 凍結保存

※適切に保存し、受取り後 2 年を目途にご使用ください。

● **製造法** 近藤らの方法²⁾ により製造

● 特長

- ピリジルアミノ (PA) 基の蛍光性により、0.03 pmol でも検出可能
- PA 基の疎水性利用により、逆相系 HPLC による分離分析が可能
- PA 基は光や強酸・強アルカリ処理、ヒドラジン分解、スミス分解、部分アセトリシス、メチル化分析などの反応条件下でも安定
- $^1\text{H NMR}$ にて構造を確認
- GC により定量

● HPLC 分析

<分析条件>および<HPLC チャート>は裏面を参照

● 参考文献

- 1) 池中徳治、長谷純宏、妻鹿友弘 (1987) タンパク質の化学 (上). 続生化学実験講座 2 巻; 日本生化学会編 (東京化学同人) p215.
2) Kondo A, *et al. Agric Biol Chem.* (1990) **54**: 2169-2170.

● 注意

本製品は研究用として販売しております。ヒト、動物への医療、臨床診断用には使用しないようご注意ください。また、食品、化粧品、家庭用品等として使用しないでください。
タカラバイオの承認を得ずに製品の再販・譲渡、再販・譲渡のための改変、商用製品の製造に使用することは禁止されています。
ライセンスに関する情報は弊社ウェブカタログをご覧ください。
本データシートに記載されている会社名および商品名などは、各社の商号、または登録済みもしくは未登録の商標であり、これらは各所有者に帰属します。

Note

This product is for research use only. It is not intended for use in therapeutic or diagnostic procedures for humans or animals. Also, do not use this product as food, cosmetic, or household item, etc. Takara products may not be resold or transferred, modified for resale or transfer, or used to manufacture commercial products without written approval from TAKARA BIO INC.

If you require licenses for other use, please contact us by phone at +81 77 565 6973 or from our website at www.takara-bio.com.

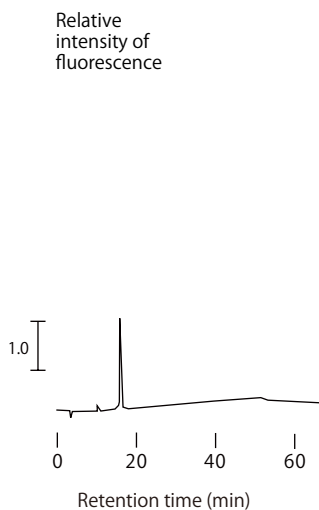
Your use of this product is also subject to compliance with any applicable licensing requirements described on the product web page. It is your responsibility to review, understand and adhere to any restrictions imposed by such statements.

All trademarks are the property of their respective owners. Certain trademarks may not be registered in all jurisdictions.

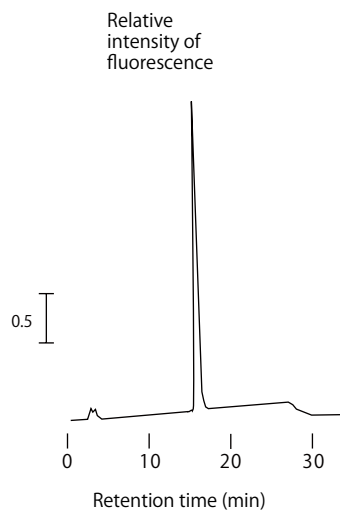
PA-Sugar Chain 034

(GD1b-hexasaccharide)

< HPLC Analysis >



Column : PALPAK Type R (4.6 mm ϕ x 250 mm)
Solvent A : 50 mM acetic acid-triethylamine (pH 5.0)
Solvent B : Solvent A containing 0.5% n-butyl alcohol
Gradient : 0 \rightarrow 50% B (0 \rightarrow 50 min)
Flow rate : 1.0 ml/min
Detection : Fluorescence (Ex 320 nm, Em 400 nm)
Column temperature : 40 $^{\circ}$ C
Injection : 10 pmol



Column : PALPAK Type S (4.6 mm ϕ x 250 mm)
Solvent A : 200 mM acetic acid-triethylamine (pH 7.3) / acetonitrile (25/75, v/v)
Solvent B : 200 mM acetic acid-triethylamine (pH 7.3) / acetonitrile (50/50, v/v)
Gradient : 0 \rightarrow 50% B (0 \rightarrow 25 min)
Flow rate : 1.0 ml/min
Detection : Fluorescence (Ex 310 nm, Em 380 nm)
Column temperature : 40 $^{\circ}$ C
Injection : 10 pmol