

Certificate of Analysis

Print Date: Oct 9th 2023

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Product Name: Ac₄GalNAlk Catalog No.: 8035 Batch No.: 1

CAS Number: 1810852-60-8

IUPAC Name: 2-Deoxy-2-[(1-oxo-4-pentyn-1-yl)amino]-D-galactopyranose-1,3,4,6-tetraacetate

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: $C_{19}H_{25}NO_{10}$.Batch Molecular Weight:427.41Physical Appearance:White solid

Solubility: DMSO to 100 mM Storage: Store at -20°C

Batch Molecular Structure:

2. ANALYTICAL DATA

HPLC: Shows 98.9% purity

¹H NMR: Consistent with structure Mass Spectrum: Consistent with structure

Microanalysis:

Carbon Hydrogen Nitrogen

Theoretical 53.39 5.9 3.28 Found 52.67 5.91 3.23



Product Information

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Description:

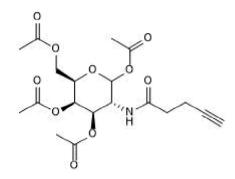
Ac₄GalNAlk is a metabolic chemical reporter (MCR) for studying glycosylation and glycoproteins. In cells expressing the engineered pyrophosphorylase mut-AGX1, Ac₄GalNAlk is efficiently converted into UDP- Ac₄GalNAlk which is incorporated into Ac₄GalNAlk-containing glycoproteins.

Physical and Chemical Properties:

Batch Molecular Formula: C₁₉H₂₅NO₁₀. Batch Molecular Weight: 427.41 Physical Appearance: White solid

Minimum Purity: ≥95%

Batch Molecular Structure:



Storage: Store at -20°C

Solubility & Usage Info:

DMSO to 100 mM

Stability and Solubility Advice:

Some solutions can be difficult to obtain and can be encouraged by rapid stirring, sonication or gentle warming (in a 45-60°C water bath).

Information concerning product stability, particularly in solution, has rarely been reported and in most cases we can only offer a general guide. *Unless contradicted by product-specific protocols or instructions, our standard recommendations apply:

SOLIDS: Provided storage is as stated on the product label and the vial is kept tightly sealed, the product can be stored for up to 6 months from date of receipt.

SOLUTIONS: We recommend that stock solutions, once prepared, are stored aliquoted in tightly sealed vials at -20°C or below and used within 1 month. Wherever possible solutions should be made up and used on the same day.

References:

Cioce et al (2021) Optimization of metabolic oligosaccharide engineering with Ac4GalNAlk and Ac4GlcNAlk by an engineered pyrophosphorylase. ACS Chem.Biol. 16 1961. PMID: 33835779.

Caution - Not Fully Tested • Research Use Only • Not For Human or Veterinary Use