

CERTIFICATE OF ANALYSIS

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1. Identification

Product:

Catalogue N500010 CAS Number: 14948-96-0

Synonym: GalNAc1-β-PNP; p-Nitrophenyl β-D-N-

p-Nitrophenyl 2-Acetamido-2-deoxy- Acetylgalactosaminide; p-Nitrophenyl-N-b-D-galactopyranoside acetyl-β-D-galactosaminide; p-Nitrophenyl-β-

N-acetylgalactosaminide;

Structure: OH OH Molecular Formula:

C14H18N2O8

Molecular weight:

342.3

Source of Product:

Synthetic **Solubility:**

DMSO (Slightly), Methanol (Slightly, Heated), Water

(Slightly)

Lot Purity: 96%

Shipping This Product Is Stable To Be Condition: Shipped At Room Temperature

Storage Condition: -20°C

2. Warning

Warning 1: Hygroscopic Warning 2: Warning 3:

3. Analytical Information

Tests: Specifications: Results:

Specific Rotation Report Result $+21.1^{\circ}$ (c = 0.1, Water)

Appearance White to Off-White Solid White Solid NMR Conforms to Structure Conforms

Elemental Analysis Conforms %C: 46.72, %H: 5.40, %N: 7.73

MS Conforms to Structure Conforms

HPLC Purity >95% 99.67% (305 nm)

Additional Information: Elemental Analysis: (Theoretical) %C: 49.12, %H: 5.30, %N: 8.18

Purity is based on the analytical results of the tests performed. NMR and Elemental Analysis (if available) may have an accuracy of \pm 2%. Isotopic purity is based on mass distribution observed. The contents of the specifications are subject to change without advance notice, and the specification values displayed here are the most up to date values.

4. Signatures

Reviewed By	Reviewed By	C of A Approved By	Test Date	Retest Date
Hanxiang Li	Toni Rantanen	My Nguyen	4/15/2020	4/13/2030

Hanxiang Li Water Money