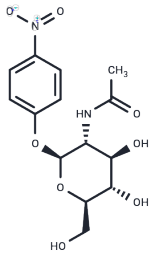
Data Sheet (Cat.No.T37575)

TargetMol

GLcNAc1-b-PNP

Chemical Properties



CAS No. : 3459-18-5

Formula: C14H18N2O8

Molecular Weight: 342.3

Storage: Store at low temperature
Powder: -20°C for 3 years | In solvent: -80°C for 1 year
Actual storage temperature shall be subject to the COA.

Biological Description

Description	GLcNAc1-b-PNP is a chromogenic substrate for N-acetyl-β-glucosaminidase and can be used to quantify the activity of N-acetyl-β-D-glucosaminidase in human serum and urine.
Targets(IC50)	Others

Solubility Information

Solubility	DMF:PBS (pH 7.2) (1:4): 0.2 mg/mL (0.58 mM),Sonication is recommended. DMF: 15 mg/mL (43.82 mM),Sonication is recommended. DMSO: 250 mg/mL (730.35 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+40% PEG300+5% Tween 80+45% Saline: 1 mg/mL (2.92 mM),Sonication is recommended. *Please add the solvents sequentially, clarifying the solution as much as possible before adding the next one. Dissolve by heating and/or sonication if necessary. Working solution is recommended to be prepared and used immediately. The formulation provided above is for reference purposes only. In vivo formulations may vary and should be modified based on specific experimental conditions.*

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.9214 mL	14.6071 mL	29.2141 mL
5 mM	0.5843 mL	2.9214 mL	5.8428 mL
10 mM	0.2921 mL	1.4607 mL	2.9214 mL
50 mM	0.0584 mL	0.2921 mL	0.5843 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

Note: The dilution table applies only to solid products. For liquid products, please calculate the stock solution based on the stated concentration and/or density.

Reference

Borooah J, Leaback DH, Walker PG. Studies on glucosaminidase. 2. Substrates for N-acetyl-beta-glucosaminidase. Biochem J. 1961 Jan;78(1):106-10.
Bowers GN Jr, et al. High-purity 4-nitrophenol: purification, characterization, and specifications for use as a spectrophotometric reference material. Clin Chem. 1980 May;26(6):724-9.
Raczkowska K, et al. Izoenzymy A i B lizosomalnej N-acetylo-beta-D-heksozoaminidazy w surowicy i moczu chorych zywionych pozajelitowo [Isoforms A and B of lysosomal N-acetyl-beta-D-hexosaminidase in serum and urine of parenterally fed patients]. Pol Merkur Lekarski. 2013 May;34(203):259-62. Polish.