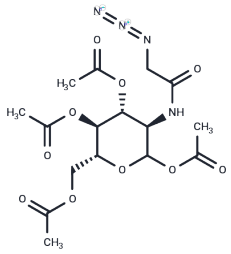
Data Sheet (Cat.No.T205750)

TargetMol

Ac4GlcNAz

Chemical Properties



CAS No. : 98924-81-3

Formula: C16H22N4O10

Molecular Weight: 430.37

Storage: 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	Ac4GlcNAz (N-azidoacetylglucosamine-tetraacylated) is a cell-permeable azide-functionalized marker of which natural monosaccharide counterpart is GlcNAc, that can observe glycan splicing by the introduction of a fluorescent moiety via click chemistry.
Targets(IC50)	Others
In vitro	Ac4GlcNAz is a chemical probe for metabolic O-GlcNAc labeling. In mammalian cells (e.g., PC-3, HeLa, HEK293), Ac4GlcNAz efficiently taken up and converted into UDP-GlcNAz, which is incorporated into proteins by OGT. At 100 μM for 24 hours, labeling is efficient and time- and dose-dependent, as shown by CuAAC detection. However, due to its per-O-acetylated structure, Ac4GlcNAz also causes undesired S-glyco modification on cysteine residues[1].

Solubility Information

Solubility	DMSO: 150 mg/mL (348.54 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: 3.3 mg/mL (7.67 mM),Sonication is recommended. 10% DMSO+90% Saline: 10 mg/mL (23.24 mM),Solution. *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	2.3236 mL	11.6179 mL	23.2358 mL
5 mM	0.4647 mL	2.3236 mL	4.6472 mL
10 mM	0.2324 mL	1.1618 mL	2.3236 mL
50 mM	0.0465 mL	0.2324 mL	0.4647 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

Wang J, Cao W, Zhang W, Dou B, Zeng X, Su S, Cao H, Ding X, Ma J, Li X. Ac34FGlcNAz is an effective metabolic chemical reporter for O-GlcNAcylated proteins with decreased S-glyco-modification. Bioorg Chem. 2023 Feb;131: 106139.