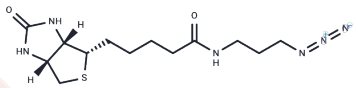
Data Sheet (Cat.No.T41046)

TargetMol

Biotin-azide

Chemical Properties



CAS No. : 908007-17-0

Formula: C13H22N6O2S

Molecular Weight: 326.42

Storage: Keep away from direct sunlight,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	Biotin-azide is a click chemistry reagent serving as a biotin labeling tool containing a terminal azide group. Biotin-azide is utilized to prepare various biotinylated conjugates via Click Chemistry and participates in the identification of newly synthesized proteins.
Targets(IC50)	Others
In vitro	**Methods**: Bioorthogonal labeling was used to validate Biotin-azide activity: Alkyne-labeled 5hmU-DNA was incubated with Biotin-azide (1 mM) in the presence of Cu-TTBA (0.5 mM) and ascorbic acid (0.5 mM) at 25°C for 12 hours. **Results**: Gel electrophoresis showed retarded bands after labeling, confirming successful Biotin-azide conjugation; control T-DNA/U-DNA showed no labeling, indicating specific recognition of alkyne-5hmU. [1]

Solubility Information

Solubility	DMSO: 50 mg/mL (153.18 mM),Sonication is recommended. H2O: 2 mg/mL (6.13 mM) (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+40% PEG300+5% Tween 80+45% Saline: 2 mg/mL (6.13 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	3.0635 mL	15.3177 mL	30.6354 mL
5 mM	0.6127 mL	3.0635 mL	6.1271 mL
10 mM	0.3064 mL	1.5318 mL	3.0635 mL
50 mM	0.0613 mL	0.3064 mL	0.6127 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

Ma, Cheng-Jie et al. An enzyme-mediated bioorthogonal labeling method for genome-wide mapping of 5-hydroxymethyluracil. Chemical science vol. 12,42 14126-14132. 4 Oct. 2021
Joiner CM, et al. A Bifunctional Amino Acid Enables Both Covalent Chemical Capture and Isolation of in Vivo Protein-Protein Interactions. Chembiochem. 2017 Jan 17;18(2):181-184.
Kim HY, et al. An azido-biotin reagent for use in the isolation of protein adducts of lipid-derived electrophiles by streptavidin catch and photorelease. Mol Cell Proteomics. 2009;8(9):2080-2089.