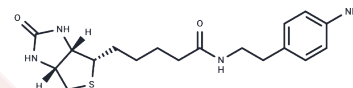


Biotin-aniline

Chemical Properties

CAS No. :	769933-15-5
Formula:	C18H26N4O2S
Molecular Weight:	362.49
Storage:	Keep away from direct sunlight Powder: -20°C for 3 years In solvent: -80°C for 1 year <small>Actual storage temperature shall be subject to the COA.</small>



Biological Description

Description	Biotin-aniline is a probe that reacts strongly to RNA and DNA. Biotin-aniline is highly efficient and is used to capture subcellular transcriptomes in living cells with high spatial specificity.
Targets(IC50)	Autophagy
Cell Research	<p>1. Subcellular transcriptome capture Experimental steps:</p> <ol style="list-style-type: none"> 1. Prepare a solution containing Biotin-aniline, which is usually dissolved in a suitable solvent (such as water or PBS). 2. Add Biotin-aniline solution to live cell culture medium and incubate for 1-2 hours under the conditions of cell growth so that Biotin-aniline can enter the cells and bind to RNA. 3. After incubation, capture and purification using avidin or avidin to isolate the target RNA. 4. Extract and analyze the target RNA and use RT-PCR, RNA-seq and other technologies for transcriptome analysis. <p>2. RNA/DNA marker Experimental steps</p> <ol style="list-style-type: none"> 1. Prepare an appropriate amount of Biotin-aniline and dissolve it in a suitable solvent. 2. Add Biotin-aniline to the target RNA or DNA sample to react with the nucleic acid. 3. Use avidin or streptavidin for labeled molecular capture. 4. Analysis is carried out through appropriate detection methods (such as fluorescence microscopy or molecular detection instrument). <p>3. Real-time analysis of living cells Experimental steps:</p> <ol style="list-style-type: none"> 1. Add Biotin-aniline solution to live cell culture medium. 2. Incubate for a certain period of time (usually 1-2 hours) under cell culture conditions. 3. Use appropriate fluorescently labeled antibodies or avidin to perform fluorescence imaging to observe the distribution and dynamics of RNA in the cells. <p>The above information is based on published literature. Experimental procedures should be appropriately modified to meet specific research demands.</p>

Solubility Information

Solubility	DMSO: 120 mg/mL (331.04 mM), Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
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Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.7587 mL	13.7935 mL	27.587 mL
5 mM	0.5517 mL	2.7587 mL	5.5174 mL
10 mM	0.2759 mL	1.3793 mL	2.7587 mL
50 mM	0.0552 mL	0.2759 mL	0.5517 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

Fan L, et al. Chrom-seq identifies RNAs at chromatin marks. *Sci Adv.* 2024 Aug 2;10(31):eadn1397.

Zhou Y, et al. Expanding APEX2 Substrates for Proximity-Dependent Labeling of Nucleic Acids and Proteins in Living Cells. *Angew Chem Int Ed Engl.* 2019 Aug 19;58(34):11763-11767.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

This product is for Research Use Only · Not for Human or Veterinary or Therapeutic Use

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