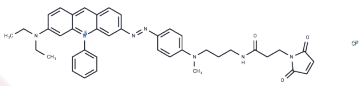
Data Sheet (Cat.No.T84299)

TargetMol

BHQ3 Maleimide

Chemical Properties



CAS No. :

Formula: C40H42ClN7O3

Molecular Weight: 704.27

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	BHQ3 Maleimide is a fluorescent probe that eliminates background fluorescence and can be used for protein labeling, nucleic acid labeling and cellular imaging.
Targets(IC50)	Others
Cell Research	Instructions 1. Protein labeling Experimental steps: 1. Prepare a protein solution containing thiol groups to ensure that the protein concentration is suitable for the reaction. 2. Prepare the BHQ3 Maleimide solution, usually dissolved in an appropriate solvent (such as DMSO). 3. Add BHQ3 Maleimide solution to the protein solution, and the reaction time is usually 1-2 hours. 4. After the reaction is completed, use dialysis or other methods to remove the unreacted BHQ3 Maleimide. 5. Fluorescence imaging or quantitative analysis of proteins is performed using a fluorescence microscope or flow cytometry. 2. Nucleic acid labeling Experimental steps: 1. Prepare a nucleic acid probe containing thiol. 2. Add BHQ3 Maleimide solution to the nucleic acid solution, and the reaction time is usually 30 minutes to 1 hour. 3. After the reaction is completed, the unreacted probe is removed by purification. 4. Use the labeled nucleic acid probes for PCR amplification, real-time quantitative PCR and other experiments. 5. Use fluorescent instruments to analyze the nucleic acid labeling results as needed. III. Cell imaging Experimental steps: 1. Prepare the cell sample and fix it (if necessary). 2. Dissolve BHQ3 Maleimide with a suitable solvent. 3. Add BHQ3 Maleimide to the cell culture medium together with the appropriate fluorescent dye. 4. After incubation for a certain period of time, use a fluorescence microscope to

Cell Research	observe the fluorescence images of the cells labeled. The above information is based on published literature. Experimental procedures should be appropriately modified to meet specific research demands.

Solubility Information

Solubility	H2O: 12.5 mg/mL (17.75 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	1.4199 mL	7.0995 mL	14.1991 mL
5 mM	0.284 mL	1.4199 mL	2.8398 mL
10 mM	0.142 mL	0.710 mL	1.4199 mL
50 mM	0.0284 mL	0.142 mL	0.284 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

Yang K,et al. Visualization of protease activity in vivo using an activatable photo-acoustic imaging probe based on CuS nanoparticles. Theranostics. 2014 Jan 2;4(2):134-41.