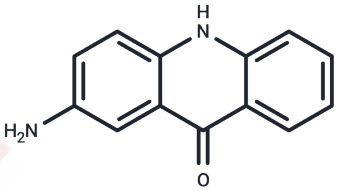
Data Sheet (Cat.No.T18882)

TargetMol

2-Aminoacridone

Chemical Properties



CAS No. : 27918-14-5

Formula: C13H10N2O

Molecular Weight: 210.23

Storage: Keep away from direct sunlight
Powder: -20°C for 3 years
Actual storage temperature shall be subject to the COA.

Biological Description

Description	2-Aminoacridone is a widely used fluorophore (λexc=428 nm, λem=525 nm).
Targets(IC50)	Others
In vitro	By using 2-Aminoacridone as labeling molecule, sensitivity for the detection of GAG-derived disaccharides is greatly enhanced, and resolution is also improved.
Cell Research	Instructions for use I. Preparation of solutions 1. Preparation of mother solution and working solution: The concentration of 2-Aminoacridone is usually between 1-10 μM in fluorescence experiments, and the specific concentration is adjusted according to the experimental requirements. For more sensitive applications, the concentration may be lower (e.g. 0.1 μM), while for experiments with larger sample volumes or requiring strong signals, the concentration can be appropriately increased (e.g. 10 μM). 2. Preparation of working solution: When performing fluorescence quantitative analysis, the amount of 2-Aminoacridone used depends on the concentration of the target molecule and the sensitivity requirements of the experiment. Generally, the concentration of the labeled solution should match the concentration of the substance to be tested to ensure optimal signal intensity. I. As a fluorescent probe Method: Dissolve 2-Aminoacridone in an appropriate solvent (such as DMSO, methanol or water). Before use, incubate it with the DNA, RNA or target molecule in the sample, usually for a short incubation time (1-2 hours). The labeling can then be analyzed using a fluorescence microscope or other fluorescence detection equipment. 2. Used for fluorescence quantitative analysis Method: In fluorescence analysis, 2-Aminoacridone can be used as a fluorescent marker to detect the DNA or RNA content in the sample. Common experimental methods include using a fluorescence spectrophotometer or a fluorescence microplate reader. The fluorescence intensity in the sample is proportional to its molecular number and is suitable for quantitative analysis. 3. Fluorescence staining: Method: In the fluorescence staining of cells or tissues, 2-Aminoacridone is used as a

Cell Research	dye and directly added to the sample to stain the cells. After staining, a fluorescence microscope is used for imaging to observe the marker signal in the cell, with an excitation wavelength of 428 nm and an emission wavelength of 525 nm. The above information is based on published literature. Experimental procedures should be appropriately modified to meet specific research demands.

Solubility Information

Solubility	DMSO: 60 mg/mL (285.4 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	4.7567 mL	23.7835 mL	47.567 mL
5 mM	0.9513 mL	4.7567 mL	9.5134 mL
10 mM	0.4757 mL	2.3783 mL	4.7567 mL
50 mM	0.0951 mL	0.4757 mL	0.9513 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

Su, X., et al., "Fluorescent Probes Based on Coumarin Derivatives for Biological Applications," Analytical Chemistry, 2017.

Pang HL, Zhang LT, Zhang YT, Ren Q. Separation and purification of bovine nasal cartilage-derived chondroitin sulfate and evaluation of its binding to bovine serum albumin. Int J Biol Macromol. 2024 Oct;277(Pt 4):134501.

Antia IU,et al. Heparan sulfate disaccharide measurement from biological samples using pre-column derivatization, UPLC-MS and single ion monitoring. Anal Biochem. 2017 Aug 1;530:17-30. doi: 10.1016/j.ab. 2017.04.019. Epub 2017 Apr 30. PMID: 28465034.