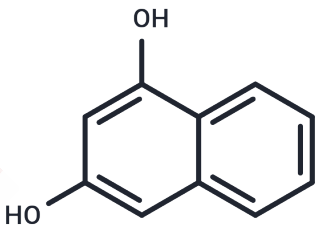
Data Sheet (Cat.No.TD0092)

TargetMol

Naphthoresorcinol

Chemical Properties



CAS No. : 132-86-5

Formula: C10H8O2

Molecular Weight: 160.17

Storage: Keep away from direct sunlight
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	Naphthoresorcinol (1,3-Dihydroxynaphthalene) is a fluorescent dye with an excitation wavelength (λex) of 330 nm and an emission wavelength (λem) of 380 nm.
Targets(IC50)	Others
Cell Research	Instructions I. Solution preparation 1. Mother solution preparation: Dissolve Naphthoresorcinol in an appropriate solvent, such as anhydrous DMSO, ethanol or water, to prepare a stock solution of the required concentration. The recommended concentration of the stock solution is 10-100 mM for subsequent dilution. 2. Working solution preparation: Dilute the mother solution into the working solution to be used according to the experimental purpose. II. Operation steps Cell staining 1. Grow cells to an appropriate density. 2. Wash the cells with PBS and remove the culture medium. 3. Add the diluted Naphthoresorcinol solution to the cells and incubate at 37°C in the dark for 15-30 minutes. 4. After incubation, wash the cells 3 times with PBS to remove unbound dye. 5. Fluorescence detection: Use a fluorescence microscope or flow cytometer for detection. The excitation wavelength of Naphthoresorcinol is about 350 nm and the emission wavelength is about 450 nm. Note: 1) Wear gloves during operation to avoid contact between skin or mucous membranes and reagents. 2) Avoid light during incubation and storage to prevent fluorescence quenching. 30 After staining, fluorescence detection analysis should be performed immediately. The above information is based on published literature. Experimental procedures should be appropriately modified to meet specific research demands.

Solubility Information

Solubility	DMSO: 50 mg/mL (312.17 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: 2.5 mg/mL (15.61 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	6.2434 mL	31.2168 mL	62.4337 mL
5 mM	1.2487 mL	6.2434 mL	12.4867 mL
10 mM	0.6243 mL	3.1217 mL	6.2434 mL
50 mM	0.1249 mL	0.6243 mL	1.2487 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

Suzuki S. Development of a field kit for use by non-scientists for chemical tracking using 5-(4-nitrophenyl)-2,4-pentadien-1-al. Forensic Sci Int. 2013 May 10;228(1-3):e25-7.

Lee YH, Lin TI. Determination of carbohydrates by high-performance capillary electrophoresis with indirect absorbance detection. J Chromatogr B Biomed Appl. 1996 May 31;681(1):87-97.

Xiong L,et al. Multifunctional lanthanide metal-organic framework based ratiometric fluorescence visual detection platform for alkaline phosphatase activity. Mikrochim Acta. 2021 Jun 24;188(7):236.

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