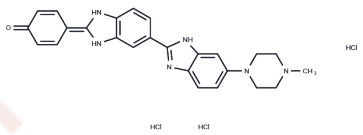
Data Sheet (Cat.No.T4057)

TargetMol

Hoechst 33258 trihydrochloride

Chemical Properties



CAS No. : 23491-45-4

Formula: C25H24N6O·3HCl

Molecular Weight: 533.9

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	Hoechst 33258 trihydrochloride (Bisbenzimide) is a benzimidazole anti-filarial agent. it is fluorescent when it binds to certain nucleotides in DNA, thus providing a tool for the study of DNA replication. it also interferes with mitosis.
Targets(IC50)	Parasite
Cell Research	Solution preparation a. Preparation of stock solution: Dissolve 10 mg in 5 mL DMSO; (It is recommended to store at -20 ℃ or -80 ℃ in the dark after aliquoting) b. Preparation of Hoechst working solution Dilute the stock solution and dissolve it in serum-free cell culture medium or PBS to obtain a Hoechst working solution with a final concentration of 10 μg/mL; (Select the appropriate working solution concentration according to experimental requirements and prepare it for immediate use) c. Cell staining 1. Suspended cells (6-well plate) a. Centrifuge at 1000 g for 3-5 minutes at 4℃, and then discard the supernatant. Wash twice with PBS for 5 minutes each. The cell density is 1×106/mL; b. Add 1 mL of working solution and incubate at room temperature for 3-10 minutes; c. Centrifuge at 400 g for 3-4 minutes at 4℃, and discard the supernatant; d. Wash twice with PBS, 5 minutes each time; e. Resuspend cells with serum-free cell culture medium or PBS. Observe with fluorescence microscope or flow cytometer. 2. Adherent cells a. Culture adherent cells on sterile coverslips; b. Remove coverslips from culture medium and aspirate excess culture medium; c. Add 100 μL working solution, shake gently to completely cover cells, and incubate at room temperature for 3-10 minutes; d. Wash twice with culture medium, 5 minutes each time. Observe with fluorescence microscope or flow cytometer. The above information is based on published literature. Experimental procedures should be appropriately modified to meet specific research demands.

Solubility Information

Solubility	DMSO: 6.58 mg/mL (12.32 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	1.873 mL	9.365 mL	18.7301 mL
5 mM	0.3746 mL	1.873 mL	3.746 mL
10 mM	0.1873 mL	0.9365 mL	1.873 mL
50 mM	0.0375 mL	0.1873 mL	0.3746 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

Wang XJ, et al. Newly synthesized bis-benzimidazole derivatives exerting anti-tumor activity through induction of apoptosis and autophagy. Bioorg Med Chem Lett. 2012 Oct 1;22(19):6297-300.

Latt, S.A. and Stetten, G. Spectral studies on 33258 Hoechst and related bisbenzimidazole dyes useful for fluorescent detection of deoxyribonucleic acid synthesis. Journal of Histochemistry and Cytochemistry 24(1), 24-33 (1976).