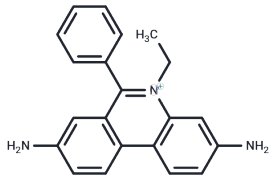
Data Sheet (Cat.No.T1220)

TargetMol

Ethidium bromide

Chemical Properties



CAS No. : 1239-45-8

Formula: C21H20BrN3

Molecular Weight: 394.32

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	Ethidium bromide (EB) A trypanocidal agent and possible antiviral agent that is widely used in experimental cell biology and biochemistry. Ethidium has several experimentally useful properties including binding to nucleic acids, noncompetitive inhibition of nicotinic acetylcholine receptors, and fluorescence among others. It is most commonly used as the bromide. Ethidium bromide has a λEx of 300-360 nm and a λEm of 590 nm.
Targets(IC50)	AChR,Autophagy
In vitro	Instructions 1. Solution preparation: Prepare agarose gel of appropriate concentration (usually 0.5% to 2.5%) according to the size of the band to be separated. 2. Operation steps 1. Accurately weigh a certain amount of agarose powder and mix it with a certain amount of 1X TAE/TBE. 2. Heat in a microwave oven for 1-3 minutes until the agarose is completely dissolved. 3. Shake the melted agar solution to mix well, pour it into the electrophoresis tank, and wait for it to solidify; 4. Add Ethidium bromide (EtBr) to a final concentration of about 0.2-0.5 μg/mL (the stock solution is usually 10 mg/mL, and 5 μL of stock solution/100 mL of gel is required); 5. Ethidium bromide binds to DNA, and DNA can be visualized under ultraviolet (UV) light. The above information is based on published literature. Experimental procedures should be appropriately modified to meet specific research demands.

Solubility Information

Solubility	DMSO: 23.86 mg/mL (60.51 mM),Sonication is recommended. H2O: 1 mg/mL (2.54 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.536 mL	12.6801 mL	25.3601 mL
5 mM	0.5072 mL	2.536 mL	5.072 mL
10 mM	0.2536 mL	1.268 mL	2.536 mL
50 mM	0.0507 mL	0.2536 mL	0.5072 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

Sigmon J, Larcom LL. The effect of ethidium bromide on mobility of DNA fragments in agarose gel electrophoresis. Electrophoresis. 1996 Oct;17(10):1524-7.

Li S, Kuang M, Chen L, et al. The mitochondrial protein ERAL1 suppresses RNA virus infection by facilitating RIG-I-like receptor signaling. Cell Reports. 2021, 34(3): 108631.

Li S, Kuang M, Chen L, et al. The mitochondrial protein ERAL1 suppresses RNA virus infection by facilitating RIG-I-like receptor signaling[J]. Cell Reports. 2021, 34(3): 108631.

Tel:781-999-4286 E_mail:info@targetmol.com Address:34 Washington Street,Wellesley Hills,MA 02481