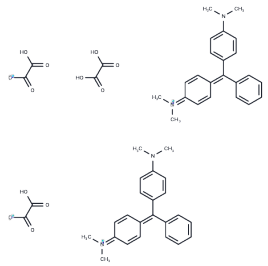
Data Sheet (Cat.No.TD0099)

TargetMol

Malachite green oxalate

Chemical Properties



CAS No. : 2437-29-8

Formula: C23H25N2·C2HO4·1/2C2H2O4

Molecular Weight: 463.51

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	Malachite green oxalate is a triphenylmethane dye which can be used to detect the release of phosphate in enzymatic reactions.
Targets(IC50)	Apoptosis,NF-κB,Antifungal,IκB/IKK
In vitro	Bacterial staining experiment Material preparation: Malachite green oxalate stain, bacterial smear to be tested, alcohol lamp, distilled water, safranin stain, etc. Experimental steps: a. Make a bacterial smear, dry it naturally and fix it with the flame of an alcohol lamp. b. Add Malachite green oxalate stain, cover the smear, heat it until steam comes out, keep it for about 5 minutes, add appropriate stain to prevent drying, and then rinse with distilled water. c. Re-stain with safranin stain for 2-3 minutes, rinse with distilled water and dry. d. Observe under a microscope, the bacteria are dyed green, and structures such as spores can be clearly observed. The above information is based on published literature. Experimental procedures should be appropriately modified to meet specific research demands.

Solubility Information

Solubility	DMSO: 8.67 mg/mL (18.71 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: 0.5 mg/mL (1.08 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	2.1575 mL	10.7873 mL	21.5745 mL
5 mM	0.4315 mL	2.1575 mL	4.3149 mL
10 mM	0.2157 mL	1.0787 mL	2.1575 mL
50 mM	0.0431 mL	0.2157 mL	0.4315 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

Gelman E, et al. Malachite green interferes with postantibiotic recovery of mycobacteria. Antimicrob Agents Chemother. 2012 Jul;56(7):3610-4.

Takahashi S, et, al. Reversible off-on fluorescence probe for hypoxia and imaging of hypoxia-normoxia cycles in live cells. J Am Chem Soc. 2012 Dec 5; 134(48): 19588-91.

Liu T, et, al. Identification of an IKBKE inhibitor with antitumor activity in cancer cells overexpressing IKBKE. Cytokine. 2019 Apr; 116: 78-87.