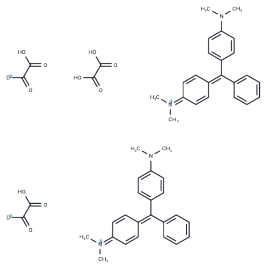
Data Sheet (Cat.No.TD0099)

TargetMol

Malachite green oxalate

Chemical Properties



CAS No. :	2437-29-8
Formula:	C23H25N2·C2HO4·1/2C2H2O4
Molecular Weight:	463.51
Appearance:	Solid
Storage:	keep away from direct sunlight Powder: -20°C for 3 years | In solvent: -80°C for 1 year

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,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.

Solubility Information

Solubility	DMSO: 8.67 mg/mL (18.7 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)

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.

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.