Data Sheet (Cat.No.T1753)



D-64131

Chemical Properties

CAS No.: 74588-78-6

Formula: C16H13NO2

Molecular Weight: 251.28

Appearance: no data available

Storage: Powder: -20°C for 3 years | In solvent: -80°C for 1 year

Biological Description

Description	D-64131 is a tubulin polymerization inhibitor with an IC50 value of 0.53 μM.
Targets(IC50)	Microtubule Associated
In vitro	D-64131 dose-dependently inhibited the polymerization of bovine brain microtubulin and the binding of [3H]colchicine to biotinylated $\alpha\beta$ -microtubulin. After treatment with D-64131, many Y cells displayed abnormal microtubule structures, such as divided mitotic spindles or multiple spindle poles. Nuclear vesicles and abnormal nuclear structures typical of apoptotic cells were detected in many cells treated with D-64131.
In vivo	D-64131 dose-dependently inhibited the polymerization of bovine brain microtubulin and the binding of [3H]colchicine to biotinylated αβ-microtubulin. After treatment with D-64131, many Y cells displayed abnormal microtubule structures, such as divided mitotic spindles or multiple spindle poles. Nuclear vesicles and abnormal nuclear structures typical of apoptotic cells were detected in many cells treated with D-64131.

Solubility Information

Solubility	DMSO: 25.1 mg/mL (99.89 mM), Sonication is recommended.	
	(< 1 mg/ml refers to the product slightly soluble or insoluble)	

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	3.9796 mL	19.8981 mL	39.7962 mL
5 mM	0.7959 mL	3.9796 mL	7.9592 mL
10 mM	0.398 mL	1.9898 mL	3.9796 mL
50 mM	0.0796 mL	0.398 mL	0.7959 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.

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Reference

Beckers T, et al. Y Res. 2002 Jun 1;62(11):3113-9.

Inhibitor • Natural Compounds • Compound Libraries • Recombinant Proteins

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