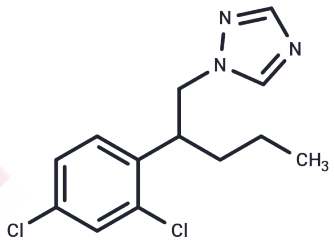
Data Sheet (Cat.No.T9802)

TargetMol

Penconazole

Chemical Properties



CAS No. : 66246-88-6

Formula: C13H15Cl2N3

Molecular Weight: 284.18

Storage: 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	Penconazole is a broad-spectrum and highly effective triazole antifungal agent that acts by inhibiting fungal sterol biosynthesis. Penconazole induces oxidative stress in rat brain and cerebellum tissues and inhibits AChE activity.
Targets(IC50)	Antifungal,Cholinesterase (ChE)
In vivo	**Methods**: Penconazole (67 mg/kg, intraperitoneal injection, 19 days) was administered to male Wistar rats to investigate its potential toxic effects on the cerebrum and cerebellum of adult rats. **Results**: Penconazole induced oxidative stress in rat cerebrum and cerebellum tissues. [2]

Solubility Information

Solubility	DMSO: 80 mg/mL (281.51 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: 3.3 mg/mL (11.61 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	3.5189 mL	17.5945 mL	35.189 mL
5 mM	0.7038 mL	3.5189 mL	7.0378 mL
10 mM	0.3519 mL	1.7594 mL	3.5189 mL
50 mM	0.0704 mL	0.3519 mL	0.7038 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

Chaâbane M, et al. Penconazole alters redox status, cholinergic function, and membrane-bound ATPases in the cerebrum and cerebellum of adult rats. Hum Exp Toxicol. 2017;36(8):854-866.
Chaâbane M, et al. Penconazole alters redox status, cholinergic function, and membrane-bound ATPases in the cerebrum and cerebellum of adult rats. Hum Exp Toxicol. 2017;36(8):854-866.