Product Data Sheet

Propiconazole

Cat. No.: HY-B0847 CAS No.: 60207-90-1 Molecular Formula: $C_{15}H_{17}Cl_{2}N_{3}O_{2}$ Molecular Weight: 342.22

Target: Fungal; Reactive Oxygen Species

Pathway: Anti-infection; Immunology/Inflammation; Metabolic Enzyme/Protease; NF-κΒ

Storage: Pure form -20°C 3 years

4°C 2 years In solvent -80°C 6 months -20°C 1 month

SOLVENT & SOLUBILITY

In Vitro

DMSO: 100 mg/mL (292.21 mM; Need ultrasonic)

Preparing Stock Solutions	Solvent Mass Concentration	1 mg	5 mg	10 mg
	1 mM	2.9221 mL	14.6105 mL	29.2210 mL
	5 mM	0.5844 mL	2.9221 mL	5.8442 mL
	10 mM	0.2922 mL	1.4610 mL	2.9221 mL

Please refer to the solubility information to select the appropriate solvent.

In Vivo

- 1. Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline Solubility: ≥ 2.5 mg/mL (7.31 mM); Clear solution
- 2. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline) Solubility: ≥ 2.5 mg/mL (7.31 mM); Clear solution
- 3. Add each solvent one by one: 10% DMSO >> 90% corn oil Solubility: ≥ 2.5 mg/mL (7.31 mM); Clear solution

BIOLOGICAL ACTIVITY

Description	Propiconazole is an orally active N-substituted triazole used as a fungicide. Propiconazole is a mouse liver hepatotoxicant and a hepatocarcinogen that has adverse reproductive and developmental toxicities in experimental animals ^{[1][2]} .
In Vivo	Propiconazole (150 mg/kg, gavage for 14 days) can induce specific hepatic P450 isoforms ^[1] . MCE has not independently confirmed the accuracy of these methods. They are for reference only.

Animal Model:	Adult male Sprague-Dawley rats $^{\left[1\right]}$.	
Dosage:	Gavage.	
Administration:	10, 75, 150 mg/kg, gavage for 14 days.	
Result:	In rat liver, propiconazole produced diffuse mild panlobular hepatocyte hypertrophy at the 150 mg/kg body weight/day dose.	

CUSTOMER VALIDATION

• Food Chem Toxicol. 2022 Aug 8;168:113354.

See more customer validations on $\underline{www.MedChemExpress.com}$

REFERENCES

- [1]. Guobin Sun, et al. Propiconazole-induced cytochrome P450 gene expression and enzymatic activities in rat and mouse liver. Toxicol Lett. 2005 Feb 15;155(2):277-87.
- [2]. ShuangLi, et al. Single and Combined Cytotoxicity Research of Propiconazole and Nano-zinc Oxide on the NIH/3T3 Cell. Procedia Environmental Sciences Volume 18, 2013, Pages 100-105.

Caution: Product has not been fully validated for medical applications. For research use only.

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