Tioconazole

Cat. No.: HY-B0319 CAS No.: 65899-73-2

Molecular Formula: $C_{16}H_{13}Cl_3N_2OS$

Molecular Weight: 387.71

Fungal; Antibiotic Target: Pathway: Anti-infection

Storage: Powder -20°C 3 years

> 4°C 2 years

-80°C In solvent 2 years

> -20°C 1 year

Product Data Sheet

SOLVENT & SOLUBILITY

In Vitro DMSO : ≥ 100 mg/mL (257.92 mM)

H₂O: < 0.1 mg/mL (insoluble)

* "≥" means soluble, but saturation unknown.

Preparing Stock Solutions	Solvent Mass Concentration	1 mg	5 mg	10 mg
	1 mM	2.5792 mL	12.8962 mL	25.7925 mL
	5 mM	0.5158 mL	2.5792 mL	5.1585 mL
	10 mM	0.2579 mL	1.2896 mL	2.5792 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 (6.45 mM); Clear solution
- 2. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline) Solubility: ≥ 2.5 mg/mL (6.45 mM); Clear solution
- 3. Add each solvent one by one: 10% DMSO >> 90% corn oil Solubility: ≥ 2.5 mg/mL (6.45 mM); Clear solution

BIOLOGICAL ACTIVITY

Description Tioconazole (UK-20349) is an antifungal imidazole derivative with broad spectrum activity. Tioconazole has inhibitory active aginst several dermatophytes and several yeasts with MIC₅₀s <3.12 mg/L and <9 mg/L, respectively^[1].

Antifungal^[1]. IC₅₀ & Target

REFERENCES	
[1]. S P Clissold, et al. Tioconazole. A review of its antimicrobial activity and therapeutic use in superficial mycoses. Drugs. 1986 Jan;31(1):29-51.	
Caution: Product has not been fully validated for medical applications. For research use only.	
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