Data Sheet (Cat.No.T1438)

TargetMol

Butoconazole nitrate

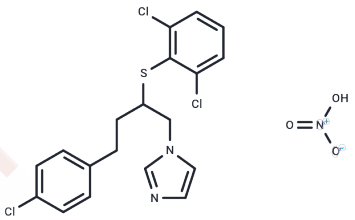
Chemical Properties

CAS No. : 64872-77-1

Formula: C19H18Cl3N3O3S

Molecular Weight: 474.79

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	Butoconazole Nitrate is the nitrate salt form of butoconazole, a synthetic imidazole derivative with fungistatic properties. Butoconazole nitrate (RS 35887) interferes with steroid biosynthesis by inhibiting the conversion of lanosterol to ergosterol, thereby changing the fungal cell membrane lipid composition. This alters cell permeability and leads to growth inhibition. Butoconazole nitrate is active against many dermatophytes and yeasts. It also contains antibacterial effects against some gram-positive organisms.
Targets(IC50)	Estrogen/progestogen Receptor,Antifungal
In vivo	Dexpanthenol has positive effects on protection of cerebral tissue after ischaemia reperfusion[1]. Topical application of dexpanthenol is widely used in clinical practice for the improvement of wound healing. Upregulation of IL-6, IL-1, CYP1B1, CXCL1, CCL18 and KAP 4-2 gene expression and downregulation of psorasin mRNA and protein expression are identified in samples treated topically with dexpanthenol[2].

Solubility Information

Solubility	H2O: < 1 mg/mL (insoluble or slightly soluble), DMSO: 250 mg/mL (526.55 mM),Sonication is recommended. Ethanol: < 1 mg/mL (insoluble or slightly soluble), (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+90% Saline: 10 mg/mL (21.06 mM),Solution. 10% DMSO+40% PEG300+5% Tween 80+45% Saline: 3.3 mg/mL (6.95 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	2.1062 mL	10.531 mL	21.0619 mL
5 mM	0.4212 mL	2.1062 mL	4.2124 mL
10 mM	0.2106 mL	1.0531 mL	2.1062 mL
50 mM	0.0421 mL	0.2106 mL	0.4212 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

Pfaller MA, et al. Diagn Microbiol Infect Dis. 1990 Jan-Feb;13(1):31-5.