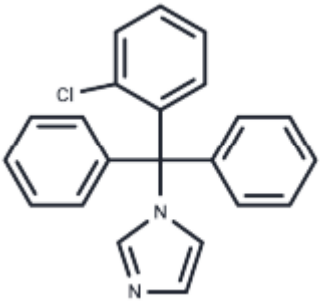
Clotrimazole

#Cat: NB-64-00682-1g **Size: 1 g**
#Cat: NB-64-00682-1mL **Size: 1 mL**
#Cat :NB-64-00682-500mg **Size: 500 mg**

Chemical Properties:



CAS No: 23593-75-1
Formula: $C_{22}H_{17}ClN_2$
Molecular Weight: 344.84
Appearance: Solid
Storage: Powder: -20°C for 3 years | In solvent: -80°C for 1 year

Biological Description:

Description	Clotrimazole (FB 5097), an imidazole derivative with a broad spectrum of antimycotic activity, inhibits biosynthesis of the sterol ergostol.
Targets (IC50)	Antibacterial,Antibiotic,Antifection,Autophagy,Antifungal
In vitro	Intradermal injection of Clotrimazole in mice stimulates capsaicin-sensitive and mustard oil-sensitive trigeminal neurons, inducing nocifensive behavior and thermal hyperalgesia. In TRPV1 knockout mice, Clotrimazole-induced pain behavior is inhibited by the TRPV1 antagonist BCTC [1,2,3,4-tetrahydro-6-trichloromethyl-pyrimidine-2-one].
In vivo	In the CRI-G1 whole-cell of a rat insulinoma cell line, Clotrimazole antagonizes ADPribose-activated and single-channel currents. Clotrimazole effectively and rapidly inhibits parasite growth across five different strains of the malignant malaria protozoan. In HEK-293 cells expressing recombinant human TRPM2, Clotrimazole inhibits ADPribose-activated currents. At 2 mM concentration, Clotrimazole completely suppresses parasite replication, resulting in the destruction of host cells. Furthermore, Clotrimazole at concentrations ranging from 3 mM to 30 mM entirely inhibits TRPM2-mediated currents

Solubility Information

Solubility	DMSO: 6.88 mg/mL (19.94 mM),Sonication is recommended. Ethanol: 64 mg/mL (185.59 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.8999 mL	14.4995 mL	28.999 mL
5 mM	0.580 mL	2.8999 mL	5.7998 mL
10 mM	0.290 mL	1.4499 mL	2.8999 mL
50 mM	0.058 mL	0.290 mL	0.580 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.

Reference

Aktas H, et al. Proc Natl Acad Sci U S A,1998, 95(14), 8280-8285.
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Eastman RT, et al. Nat Rev Microbiol,2009, 7(12), 864-874.
Tiffert T, et al. Proc Natl Acad Sci U S A,2000, 97(1), 331-336.
Meseguer V, et al. J Neurosci,2008, 28(3), 576-586.