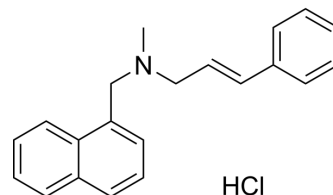


Naftifine hydrochloride

Cat. No.:	HY-B0518A
CAS No.:	65473-14-5
Molecular Formula:	C ₂₁ H ₂₂ ClN
Molecular Weight:	323.86
Target:	Fungal; Antibiotic
Pathway:	Anti-infection
Storage:	4°C, sealed storage, away from moisture * In solvent : -80°C, 6 months; -20°C, 1 month (sealed storage, away from moisture)



SOLVENT & SOLUBILITY

In Vitro

DMSO : 100 mg/mL (308.78 mM; Need ultrasonic)
Ethanol : 25 mg/mL (77.19 mM; Need ultrasonic)

Preparing Stock Solutions	Solvent Concentration	Mass		
		1 mg	5 mg	10 mg
	1 mM	3.0878 mL	15.4388 mL	30.8775 mL
	5 mM	0.6176 mL	3.0878 mL	6.1755 mL
	10 mM	0.3088 mL	1.5439 mL	3.0878 mL

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

In Vivo

- Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline
Solubility: ≥ 2.5 mg/mL (7.72 mM); Clear solution
- Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)
Solubility: ≥ 2.5 mg/mL (7.72 mM); Clear solution
- Add each solvent one by one: 10% DMSO >> 90% corn oil
Solubility: ≥ 2.5 mg/mL (7.72 mM); Clear solution
- Add each solvent one by one: 10% EtOH >> 40% PEG300 >> 5% Tween-80 >> 45% saline
Solubility: ≥ 2.5 mg/mL (7.72 mM); Clear solution
- Add each solvent one by one: 10% EtOH >> 90% (20% SBE-β-CD in saline)
Solubility: ≥ 2.5 mg/mL (7.72 mM); Clear solution

BIOLOGICAL ACTIVITY

Description

Naftifine hydrochloride is an antibiotic. Naftifine hydrochloride has antifungal activity against dermatophytes, aspergilli, *Sporothrix schenckii*, and yeasts of the genus *Candida*. Naftifine hydrochloride can be used for the research of superficial dermatomycoses inhibition^[1].

In Vitro

Naftifine exhibits an interesting in vitro spectrum of activity against dermatophytes (38 strains; minimal inhibitory concentration (MIC) range 0.1 to 0.2 mg/mL), aspergilli (6 strains; MIC range, 0.8 to 12.5 mg/mL), *Sporothrix schenckii* (2 strains; MICs, 0.8 and 1.5 mg/mL), and yeasts of the genus *Candida* (77 strains; MIC range, 1.5 to greater than 100 mg/mL)^[1]. MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

- [1]. Georgopoulos, A., et al., In vitro activity of naftifine, a new antifungal agent. *Antimicrob Agents Chemother*, 1981. 19(3): p. 386-9.
- [2]. Ryder, N.S., G. Seidl, and P.F. Troke, Effect of the antimycotic drug naftifine on growth of and sterol biosynthesis in *Candida albicans*. *Antimicrob Agents Chemother*, 1984. 25(4): p. 483-7.
- [3]. Parish, L.C., et al., A double-blind, randomized, vehicle-controlled study evaluating the efficacy and safety of naftifine 2% cream in tinea cruris. *J Drugs Dermatol*, 2011. 10(10): p. 1142-7.
- [4]. Gupta, A.K., J.E. Ryder, and E.A. Cooper, Naftifine: a review. *J Cutan Med Surg*, 2008. 12(2): p. 51-8.

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

Tel: 609-228-6898

Fax: 609-228-5909

E-mail: tech@MedChemExpress.com

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA