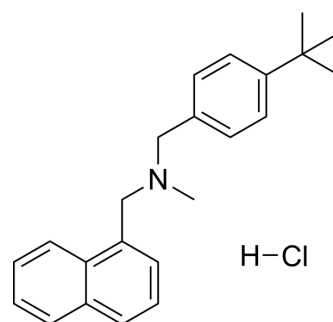


Butenafine Hydrochloride

Cat. No.:	HY-17396
CAS No.:	101827-46-7
Molecular Formula:	C ₂₃ H ₂₈ ClN
Molecular Weight:	353.93
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 : 25 mg/mL (70.64 mM; Need ultrasonic)					
	H ₂ O : 1 mg/mL (2.83 mM; Need ultrasonic)					
	Preparing Stock Solutions	Solvent	Mass	1 mg	5 mg	10 mg
		Concentration				
		1 mM		2.8254 mL	14.1271 mL	28.2542 mL
5 mM			0.5651 mL	2.8254 mL	5.6508 mL	
10 mM		0.2825 mL	1.4127 mL	2.8254 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 (7.06 mM); Clear solution					
	2. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline) Solubility: ≥ 2.5 mg/mL (7.06 mM); Clear solution					
	3. Add each solvent one by one: 10% DMSO >> 90% corn oil Solubility: ≥ 2.5 mg/mL (7.06 mM); Clear solution					

BIOLOGICAL ACTIVITY

Description	Butenafine Hydrochloride (KP363 Hydrochloride) is a synthetic benzylamine antifungal, works by inhibiting the synthesis of sterols by inhibiting squalene epoxidase.
IC₅₀ & Target	Antifungal; squalene epoxidase
In Vitro	Butenafine Hydrochloride, a benzylamine derivative, is an antifungal which is used to control dermal fungal infections such as athletes foot and ring worm. Butenafine Hydrochloride is squalene epoxidase inhibitor, inhibits the synthesis of ergosterol needed in fungal cell membranes. The drug has excellent penetration into the epidermis and a prolonged

retention time following topical application, conferring residual therapeutic activity after treatment cessation. Butenafine possess anti-inflammatory activity too. Butenafine hydrochloride 1% cream is safe and effective for tinea corporis cruris and tinea manuum pedis.

MCE has not independently confirmed the accuracy of these methods. They are for reference only.

CUSTOMER VALIDATION

- Cell Death Dis. 2021 May 13;12(5):482.

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

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