

## Butenafine-<sup>13</sup>C,d<sub>3</sub> hydrochloride

Cat. No.: HY-17396S  $\label{eq:model} \mbox{Molecular Formula:} \qquad \mbox{$C_{22}$}^{13}\mbox{CH}_{25}\mbox{$D_3$}\mbox{ClN}$ 

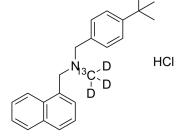
Molecular Weight: 357.94

Target: Fungal; Antibiotic; Isotope-Labeled Compounds

Pathway: Anti-infection; Others

Storage: Please store the product under the recommended conditions in the Certificate of

Analysis.



## **BIOLOGICAL ACTIVITY**

Description	Butenafine- $^{13}$ C,d <sub>3</sub> (hydrochloride) is the $^{13}$ C- and deuterium labeled. Butenafine Hydrochloride (KP363 Hydrochloride) is a synthetic benzylamine antifungal, works by inhibiting the synthesis of sterols by inhibiting squalene epoxidase.
In Vitro	Stable heavy isotopes of hydrogen, carbon, and other elements have been incorporated into drug molecules, largely as tracers for quantitation during the drug development process. Deuteration has gained attention because of its potential to affect the pharmacokinetic and metabolic profiles of drugs <sup>[42]</sup> .  MCE has not independently confirmed the accuracy of these methods. They are for reference only.

## **REFERENCES**

- [1]. Russak EM, et al. Impact of Deuterium Substitution on the Pharmacokinetics of Pharmaceuticals. Ann Pharmacother. 2019;53(2):211-223.
- [2]. Butenafine
- [3]. Kokjohn K, Bradley M, Griffiths B, Ghannoum M. Evaluation of in vitro activity of ciclopirox olamine, butenafine HCl and econazole nitrate against dermatophytes, yeasts and bacteria. Int J Dermatol. 2003 Sep;42 Suppl 1:11-7.
- [4]. McNeely W, Spencer CM. Butenafine. Drugs. 1998 Mar;55(3):405-12; discussion 413.
- [5]. Singal A. Butenafine and superficial mycoses: current status. Expert Opin Drug Metab Toxicol. 2008 Jul;4(7):999-1005.
- [6]. Syed TA, Maibach HI. Butenafine hydrochloride: for the treatment of interdigital tinea pedis. Expert Opin Pharmacother. 2000 Mar;1(3):467-73.

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

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