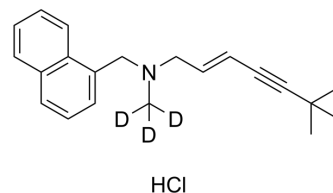


## Terbinafine-d3 hydrochloride

<b>Cat. No.:</b>	HY-17395S
<b>CAS No.:</b>	1310012-15-7
<b>Molecular Formula:</b>	C <sub>21</sub> H <sub>23</sub> D <sub>3</sub> ClN
<b>Molecular Weight:</b>	330.91
<b>Target:</b>	Fungal; Bacterial; Antibiotic
<b>Pathway:</b>	Anti-infection
<b>Storage:</b>	Please store the product under the recommended conditions in the Certificate of Analysis.



### BIOLOGICAL ACTIVITY

<b>Description</b>	Terbinafine-d3 (TDT 067-d3) hydrochloride is the deuterium labeled Terbinafine hydrochloride. Terbinafine hydrochloride (TDT 067 hydrochloride) is an antifungal medication used to treat fungal infections. It is a potent non-competitive inhibitor of squalene epoxidase from <i>Candida</i> with a K <sub>i</sub> of 30 nM <sup>[1][2]</sup> . Terbinafine hydrochloride also antibacterial activity against certain Gram-positive and Gram-negative bacteria <sup>[3]</sup> .
<b>In Vitro</b>	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>[1]</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):211-216.
- [2]. Ciftci E, et al. Mupirocin vs terbinafine in impetigo. *Indian J Pediatr.* 2002 Aug;69(8):679-82.
- [3]. Mieth H, et al. Preclinical evaluation of terbinafine in vivo. *Clin Exp Dermatol.* 1989 Mar;14(2):104-8.
- [4]. Ryder NS, et al. Terbinafine: mode of action and properties of the squalene epoxidase inhibition. *Br J Dermatol.* 1992 Feb;126 Suppl 39:2-8.

**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