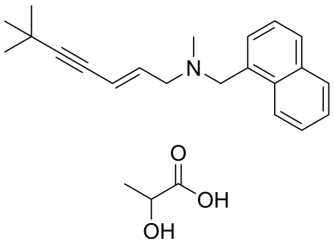
Terbinafine lactate

Cat. No.:	HY-17395B
CAS No.:	335276-86-3
Molecular Formula:	$C_{24}H_{31}NO_3$
Molecular Weight:	381.51
Target:	Antibiotic; Fungal; Bacterial
Pathway:	Anti-infection
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description	Terbinafine lactate (TDT 067 lactate) is an orally active and potent antifungal agent. Terbinafine lactate is a potent non-competitive inhibitor of squalene epoxidase from Candida, with a K_i of 30 nM. Terbinafine lactate also shows antibacterial activity against certain Gram-positive and Gram-negative bacteria[1][2][3]. Terbinafine (lactate) is a click chemistry reagent, it contains an Alkyne group and can undergo copper-catalyzed azide-alkyne cycloaddition (CuAAc) with molecules containing Azide groups.
In Vitro	Terbinafine has a primary fungicidal action in vitro against most fungal pathogens, including dermatophytes, and dimorphic and filamentous fungi. Terbinafine specifically inhibits fungal ergosterol biosynthesis at the point of squalene epoxidation. The treated fungal cells rapidly accumulate tlic intermediate squalene and become deficient in the end-product of the pathway, ergosterol[1]. MCE has not independently confirmed the accuracy of these methods. They are for reference only.
In Vivo	Terbinafine is not only active after topical application but is very effective in experimental dermatophytoses following oral administration. In fungi infected guinea-pigs, the skin temperature dropps dramatically after the fourth treatment of terbinafine[2]. MCE has not independently confirmed the accuracy of these methods. They are for reference only.

CUSTOMER VALIDATION

- Cancer Commun (Lond). 2021 Jul 16.
- Adv Healthc Mater. 2023 May 20;e2300018.
- Cell Death Dis. 2021 May 13;12(5):482.
- Infect Drug Resist. 2022: 7459-7473.
- Research Square Preprint. 2023 Sep 26.

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REFERENCES

[1]. 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.

[2]. Mieth H, et al. Preclinical evaluation of terbinafine in vivo. Clin Exp Dermatol. 1989 Mar;14(2):104-8.

[3]. Ciftci E, et al. Mupirocin vs terbinafine in impetigo.Indian J Pediatr. 2002 Aug;69(8):679-82.

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