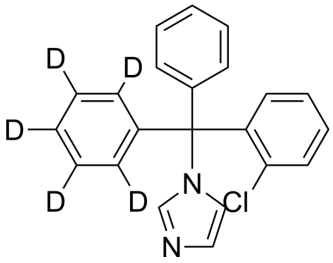
Clotrimazole-d_5

Cat. No.:	HY-10882S
CAS No.:	1185076-41-8
Molecular Formula:	$C_{22}H_{12}D_5ClN_2$
Molecular Weight:	349.87
Target:	Fungal; Bacterial; Autophagy; Antibiotic; Isotope-Labeled Compounds
Pathway:	Anti-infection; Autophagy; Others
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description	Clotrimazole-d_5 is the deuterium labeled Clotrimazole. Clotrimazole is an imidazole derivative, an antifungal compound and is a CYP (cytochrome P450) inhibitor. Clotrimazole has antibacterial activity[1][2].
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[1]. 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]. Schaller K. In vitro antibacterial activity of different clotrimazole formulations. Chemotherapy. 1982;28 Suppl 1:32-6.

[3]. Sawyer PR, Clotrimazole: a review of its antifungal activity and therapeutic efficacy. Drugs. 1975;9(6):424-47.

[4]. Witzke A, Inhibition of the gastric H,K-ATPase by clotrimazole. Biochemistry. 2010 Jun 1;49(21):4524-32.

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