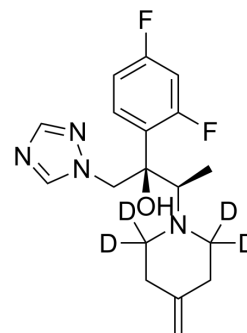


Efinaconazole-d₄

Cat. No.:	HY-15660S		
Molecular Formula:	C ₁₈ H ₁₈ D ₄ F ₂ N ₄ O		
Molecular Weight:	352.41		
Target:	Fungal; Isotope-Labeled Compounds		
Pathway:	Anti-infection; Others		
Storage:	Powder	-20°C	3 years
		4°C	2 years
	In solvent	-80°C	6 months
		-20°C	1 month



BIOLOGICAL ACTIVITY

Description	Efinaconazole-d ₄ is the deuterium labeled Efinaconazole. Efinaconazole (KP-103) is a triazole antifungal agent and againsts T. mentagrophytes SM-110 and C. albicans ATCC 10231 with MICs of 0.0039 µg/mL and 0.00098 µg/mL, respectively[1]. Efinaconazole has a potent in vitro activity against fungal pathogens including dermatophytes, Candida and Malassezia species[1].
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]. Tatsumi Y, et al. Mechanism of action of efinaconazole, a novel triazole antifungal agent. *Antimicrob Agents Chemother.* 2013 May;57(5):2405-9.
- [3]. Tatsumi Y, et al. KP-103, a novel triazole derivative, is effective in preventing relapse and successfully treating experimental interdigital tinea pedis and tinea corporis in guinea pigs. *Microbiol Immunol.* 2002;46(7):425-32.

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