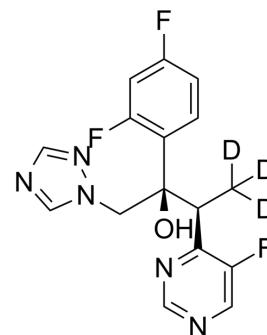


Voriconazole-d₃

Cat. No.:	HY-76200S		
CAS No.:	1217661-14-7		
Molecular Formula:	C ₁₆ H ₁₁ D ₃ F ₃ N ₅ O		
Molecular Weight:	352.33		
Target:	Fungal		
Pathway:	Anti-infection		
Storage:	Powder	-20°C	3 years
		4°C	2 years
	In solvent	-80°C	6 months
		-20°C	1 month



SOLVENT & SOLUBILITY

In Vitro

DMSO : ≥ 50 mg/mL (141.91 mM)
 H₂O : 0.17 mg/mL (0.48 mM; Need ultrasonic)
 * "≥" means soluble, but saturation unknown.

Preparing Stock Solutions	Solvent	Mass	1 mg	5 mg	10 mg
	Concentration				
	1 mM		2.8382 mL	14.1912 mL	28.3825 mL
	5 mM		0.5676 mL	2.8382 mL	5.6765 mL
	10 mM		0.2838 mL	1.4191 mL	2.8382 mL

Please refer to the solubility information to select the appropriate solvent.

BIOLOGICAL ACTIVITY

Description

Voriconazole-d₃ is the deuterium labeled Voriconazole. Voriconazole (UK-109496) is a second-generation, broad-spectrum triazole antifungal agent that inhibits fungal ergosterol biosynthesis. Voriconazole exerts its antifungal activity by inhibition of 14-α-lanosterol demethylation, which is mediated by fungal cytochrome P450 enzymes^{[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]. Nickie D Greer. Voriconazole: the newest triazole antifungal agent.Proc (Bayl Univ Med Cent). 2003 Apr;16(2):241-8.

[3]. Lesley J Scott, et al. Voriconazole : a review of its use in the management of invasive fungal infections.Drugs. 2007;67(2):269-98.

[4]. A M Sugar,et al. Efficacy of voriconazole in treatment of murine pulmonary blastomycosis.Antimicrob Agents Chemother. 2001 Feb;45(2):601-4.

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

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