## Penconazole-d<sub>7</sub>

Cat. No.:	HY-135761S		
CAS No.:	1628110-84-	-8	
Molecular Formula:	C <sub>13</sub> H <sub>8</sub> D <sub>7</sub> Cl <sub>2</sub> I	N <sub>3</sub>	
Molecular Weight:	291.23		
Target:	Fungal; Cholinesterase (ChE)		
Pathway:	Anti-infection; Neuronal Signaling		
Storage:	Powder	-20°C	3 years
		4°C	2 years
	In solvent	-80°C	6 months
		-20°C	1 month

## **BIOLOGICAL ACTIVITY**

Description	Penconazole-d <sub>7</sub> is the deuterium labeled Penconazole[1]. Penconazole is a typical triazole fungicide, and mainly applied on apples, grapes, and vegetables to control powdery mildew. Penconazole inhibits sterol biosynthesis in fungi. Penconazole decrease AChE activity in the cerebrum and cerebellum of rats[2][3].
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 <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 Feb;53(2):211-216.

[2]. Husak VV, et al. Acute exposure to the penconazole-containing fungicide Topas partially augments antioxidant potential in goldfish tissues. Comp Biochem Physiol C Toxicol Pharmacol. 2017;193:1-8.

[3]. Chaâbane M, et al. Penconazole alters redox status, cholinergic function, and membrane-bound ATPases in the cerebrum and cerebellum of adult rats. Hum Exp Toxicol. 201736(8):854-866.

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

Tel: 609-228-6898 Fax: 609-228-5909

228-5909 E-mail: tech@MedChemExpress.com

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA



Product Data Sheet

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