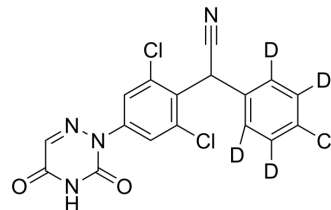


Diclazuril-d₄

Cat. No.:	HY-B0357S		
CAS No.:	1632495-80-7		
Molecular Formula:	C ₁₇ H ₅ D ₄ Cl ₃ N ₄ O ₂		
Molecular Weight:	411.66		
Target:	Parasite; Antibiotic; 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



SOLVENT & SOLUBILITY

In Vitro

DMSO : 25 mg/mL (60.73 mM; Need ultrasonic)

Concentration	Solvent	Mass		
		1 mg	5 mg	10 mg
Preparing Stock Solutions	1 mM	2.4292 mL	12.1459 mL	24.2919 mL
	5 mM	0.4858 mL	2.4292 mL	4.8584 mL
	10 mM	0.2429 mL	1.2146 mL	2.4292 mL

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

BIOLOGICAL ACTIVITY

Description

Diclazuril-d₄ is deuterium labeled Diclazuril. Diclazuril (R-64433), a benzeneacetonitrile derivative, is a potent and orally active anticoccidial agent. Diclazuril can be used for the research of certain infectious and parasitic diseases, including coccidiosis, acute toxoplasmosis, equine protozoal pyoencephalitis (EPM) et.al[1][2].

IC₅₀ & Target

Coccidia

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]. Diaferia, M., et al., Efficacy of toltrazuril 5 % suspension (Baycox(R), Bayer) and diclazuril (Vecoxan(R), Janssen-Cilag) in the control of Eimeria spp. in lambs. Parasitol Res, 2013. 112 Suppl 1: p. 163-8.

[3]. <http://www.huvepharma.com/products/view/190>

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