## Diclazuril-d<sub>4</sub>

**MedChemExpress** 

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

BIOLOGICAL ACTIVITY		
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Description	Diclazuril-d <sub>4</sub> 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].	
IC <sub>50</sub> & 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 <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;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.

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