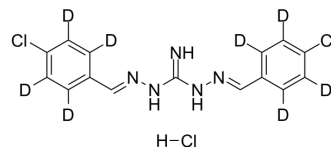


## Robenidine-d<sub>8</sub> hydrochloride

<b>Cat. No.:</b>	HY-B2157S
<b>CAS No.:</b>	1173097-77-2
<b>Molecular Formula:</b>	C <sub>15</sub> H <sub>6</sub> D <sub>8</sub> Cl <sub>3</sub> N <sub>5</sub>
<b>Molecular Weight:</b>	378.71
<b>Target:</b>	Bacterial; Parasite
<b>Pathway:</b>	Anti-infection
<b>Storage:</b>	4°C, sealed storage, away from moisture * In solvent : -80°C, 6 months; -20°C, 1 month (sealed storage, away from moisture)



### SOLVENT & SOLUBILITY

#### In Vitro

DMSO : 6.25 mg/mL (16.50 mM; Need ultrasonic)  
 DMSO : 6.25 mg/mL (16.50 mM; Need ultrasonic)  
 H<sub>2</sub>O : 1 mg/mL (2.64 mM; ultrasonic and warming and heat to 80°C)  
 H<sub>2</sub>O : 1 mg/mL (2.64 mM; ultrasonic and warming and heat to 80°C)

Preparing Stock Solutions	Solvent Concentration	Mass	1 mg	5 mg	10 mg
		Concentration	1 mg	5 mg	10 mg
	1 mM		2.6405 mL	13.2027 mL	26.4054 mL
	5 mM		0.5281 mL	2.6405 mL	5.2811 mL
	10 mM		0.2641 mL	1.3203 mL	2.6405 mL

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

### BIOLOGICAL ACTIVITY

#### Description

Robenidine-d<sub>8</sub> (hydrochloride) is the deuterium labeled Robenidine hydrochloride. Robenidine hydrochloride is an anticommodial agent which is also active against MRSA and VRE with MIC<sub>50</sub>s of 8.1 and 4.7 μM, respectively.

#### 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

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[1]. Russak EM, et al. Impact of Deuterium Substitution on the Pharmacokinetics of Pharmaceuticals. *Ann Pharmacother.* 2019;53(2):211-216.

[2]. Abraham RJ, et al. Robenidine Analogues as Gram-Positive Antibacterial Agents. *J Med Chem.* 2016 Mar 10;59(5):2126-38.

[3]. Liu C, et al. Influence of three coccidiostats on the pharmacokinetics of florfenicol in rabbits. *Exp Anim.* 2015;64(1):73-9.

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

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