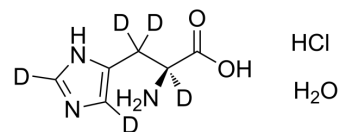


## L-Histidine-d<sub>5</sub> hydrochloride hydrate

<b>Cat. No.:</b>	HY-W014423S4
<b>CAS No.:</b>	2483831-75-8
<b>Molecular Formula:</b>	C <sub>6</sub> H <sub>7</sub> D <sub>5</sub> ClN <sub>3</sub> O <sub>3</sub>
<b>Molecular Weight:</b>	214.66
<b>Target:</b>	Endogenous Metabolite; Isotope-Labeled Compounds
<b>Pathway:</b>	Metabolic Enzyme/Protease; Others
<b>Storage:</b>	4°C, sealed storage, away from moisture and light * In solvent : -80°C, 6 months; -20°C, 1 month (sealed storage, away from moisture and light)



### SOLVENT & SOLUBILITY

#### In Vitro

H<sub>2</sub>O : 125 mg/mL (582.32 mM; ultrasonic and adjust pH to 6 with NaOH)

Concentration	Mass		
	1 mg	5 mg	10 mg
1 mM	4.6585 mL	23.2926 mL	46.5853 mL
5 mM	0.9317 mL	4.6585 mL	9.3171 mL
10 mM	0.4659 mL	2.3293 mL	4.6585 mL

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

### BIOLOGICAL ACTIVITY

#### Description

L-Histidine-d<sub>5</sub> (hydrochloride hydrate) is the deuterium labeled L-Histidine hydrochloride hydrate. L-Histidine hydrochloride hydrate (H-His-OH.HCl.H<sub>2</sub>O) is an endogenous metabolite.

#### 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.

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

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