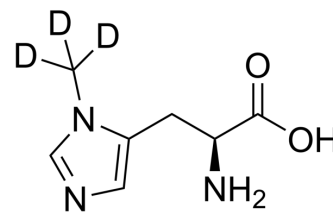


3-Methyl-L-histidine-d₃ hydrochloride

Cat. No.:	HY-W017007SA
Molecular Formula:	C ₇ H ₉ D ₃ ClN ₃ O ₂
Molecular Weight:	208.66
Target:	Isotope-Labeled Compounds; Endogenous Metabolite
Pathway:	Others; Metabolic Enzyme/Protease
Storage:	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)



HCl

SOLVENT & SOLUBILITY

In Vitro

DMSO : 100 mg/mL (479.25 mM; Need ultrasonic)

Concentration	Solvent	Mass		
		1 mg	5 mg	10 mg
Preparing Stock Solutions	1 mM	4.7925 mL	23.9624 mL	47.9249 mL
	5 mM	0.9585 mL	4.7925 mL	9.5850 mL
	10 mM	0.4792 mL	2.3962 mL	4.7925 mL

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

BIOLOGICAL ACTIVITY

Description

3-Methyl-L-histidine-d₃ hydrochloride is the deuterium labeled 3-Methyl-L-histidine hydrochloride. 3-Methyl-L-histidine hydrochloride can be found in actin and myosin and is a derivative of histidine^{[1][2]}.

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]. White WJ, Lawrie RA. Variations in the levels of 3-methyl-L-histidine of the myosins within the bovine carcass. *Meat Sci.* 1985;15(3):173-81.
- [2]. Russak EM, et al. Impact of Deuterium Substitution on the Pharmacokinetics of Pharmaceuticals. *Ann Pharmacother.* 2019;53(2):211-216.

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

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