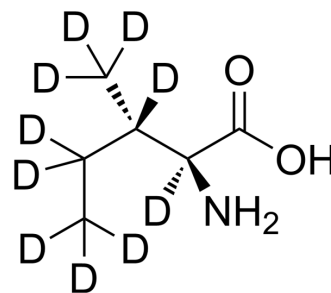


L-Isoleucine-d₁₀

Cat. No.:	HY-N0771S3
CAS No.:	35045-71-7
Molecular Formula:	C ₆ H ₃ D ₁₀ NO ₂
Molecular Weight:	141.23
Target:	Endogenous Metabolite
Pathway:	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)



SOLVENT & SOLUBILITY

In Vitro

H₂O : 8.33 mg/mL (58.98 mM; Need ultrasonic)

Concentration	Solvent	Mass		
		1 mg	5 mg	10 mg
Preparing Stock Solutions	1 mM	7.0806 mL	35.4032 mL	70.8065 mL
	5 mM	1.4161 mL	7.0806 mL	14.1613 mL
	10 mM	0.7081 mL	3.5403 mL	7.0806 mL

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

BIOLOGICAL ACTIVITY

Description

L-Isoleucine-d₁₀ is the deuterium labeled L-Isoleucine. L-isoleucine is a nonpolar hydrophobic amino acid[1]. L-Isoleucine is an essential amino acid.

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]. Arkhipov SG, et al. New hydrophobic L-amino acid salts: maleates of L-leucine, L-isoleucine and L-norvaline. *Acta Crystallogr C Struct Chem*. 2015 Jul;71(Pt 7):584-92.

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

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