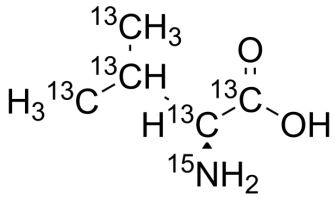
L-Valine-$^{13}C_5$,^{15}N

Cat. No.:	HY-N0717S1
CAS No.:	202407-30-5
Molecular Formula:	$^{13}C_5H_{11}{}^{15}NO_2$
Molecular Weight:	123.1
Target:	Endogenous Metabolite
Pathway:	Metabolic Enzyme/Protease
Storage:	Powder -20°C 3 years 4°C 2 years In solvent -80°C 6 months -20°C 1 month



SOLVENT & SOLUBILITY

In Vitro

H_2O : 35.71 mg/mL (290.09 mM; ultrasonic and warming and heat to 60°C)

Preparing Stock Solutions	Solvent / Mass / Concentration	1 mg	5 mg	10 mg
	1 mM	8.1235 mL	40.6174 mL	81.2348 mL
	5 mM	1.6247 mL	8.1235 mL	16.2470 mL
	10 mM	0.8123 mL	4.0617 mL	8.1235 mL

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

BIOLOGICAL ACTIVITY

Description

L-Valine-$^{13}C_5$,^{15}N is the ^{13}C- and ^{15}N-labeled L-Valine. L-Valine is one of 20 proteinogenic amino acids. L-Valine is an essential amino acid[1].

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.

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

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