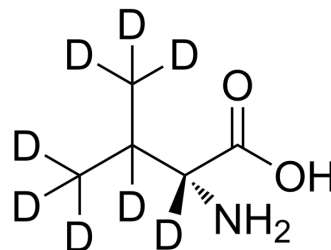


D-Valine-d₈

Cat. No.:	HY-N0717AS		
CAS No.:	1116448-82-8		
Molecular Formula:	C ₅ H ₃ D ₈ NO ₂		
Molecular Weight:	125.2		
Target:	Endogenous Metabolite; Isotope-Labeled Compounds		
Pathway:	Metabolic Enzyme/Protease; Others		
Storage:	Powder	-20°C	3 years
		4°C	2 years
	In solvent	-80°C	6 months
		-20°C	1 month



SOLVENT & SOLUBILITY

In Vitro

H₂O : 14.29 mg/mL (114.14 mM; Need ultrasonic and warming)

Concentration	Solvent	Mass		
		1 mg	5 mg	10 mg
Preparing Stock Solutions	1 mM	7.9872 mL	39.9361 mL	79.8722 mL
	5 mM	1.5974 mL	7.9872 mL	15.9744 mL
	10 mM	0.7987 mL	3.9936 mL	7.9872 mL

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

BIOLOGICAL ACTIVITY

Description

D-Valine-d₈ is the deuterium labeled D-Valine. D-Valine is the enantiomer of L-Valine (HY-N0717). L-Valine is one of 20 proteinogenic amino acids. L-Valine 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.

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

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