## **Product** Data Sheet

## L-Valine-d

Cat. No.: HY-N0717S8

CAS No.: 77257-03-5

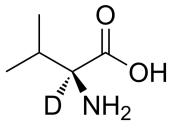
Molecular Formula:  $C_5H_{10}DNO_2$ Molecular Weight: 118.15

Target: Endogenous Metabolite; Isotope-Labeled Compounds

Pathway: Metabolic Enzyme/Protease; Others

Storage: Please store the product under the recommended conditions in the Certificate of

Analysis.



## **BIOLOGICAL ACTIVITY**

Description	L-Valine-d is the deuterium 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 <sup>[1]</sup> .  MCE has not independently confirmed the accuracy of these methods. They are for reference only.

## **REFERENCES**

[1]. Oldiges, et al. Application of metabolic engineering for the biotechnological production of L-valine. Appl Microbiol Biotechnol 98, 5859-5870 (2014).

[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.

Tel: 609-228-6898

Fax: 609-228-5909

E-mail: tech@MedChemExpress.com

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA