
Product Data Sheet

Product Name: L-Valine-15N

Cat. No.: GC63901

Chemical Properties

Cas. No. 59935-29-4

Formula C₅H₁₁N₂O₂

M.Wt 118.14

Solubility H₂O : 20 mg/mL (169.29 mM; Need ultrasonic)

Storage Store at -20°C

General tips

For obtaining a higher solubility , please warm the tube at 37 °C and shake it in the ultrasonic bath for a while. Stock solution can be stored below -20°C for several months.

Shipping Condition Evaluation sample solution : ship with blue ice All other available size: ship with RT , or blue ice upon request.

Structure

Background

L-Valine-15N is the 15N-labeled L-Valine. L-Valine is one of 20 proteinogenic amino acids. L-Valine is an essential amino acid[1][2].

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].

[1]. Russak EM, et al. Impact of Deuterium Substitution on the Pharmacokinetics of Pharmaceuticals. *Ann Pharmacother*. 2019;53(2):211-216. [2]. Oldiges, et al. Application of metabolic engineering for the biotechnological production of L-valine. *Appl Microbiol Biotechnol* 98, 5859-5870 (2014).

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

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