
Product Data Sheet

Product Name: Glycine-15N

Cat. No.: GC64249

Chemical Properties

Cas. No. 7299-33-4

Formula C₂H₅¹⁵N₂O₂

M.Wt 76.06

Solubility H₂O : 25 mg/mL (328.69 mM; Need ultrasonic and warming);

Store

H₂O : 25 mg/mL (328.69 mM; Need ultrasonic)

Storage 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**

Glycine-15N is the 15N-labeled Glycine. Glycine is an inhibitory neurotransmitter in the CNS and also acts as a co-agonist along with glutamate, facilitating an excitatory potential at the glutaminergic N-methyl-D-aspartic acid (NMDA) receptors[1].

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]. Johnson JW, et al. Glycine potentiates the NMDA response in cultured mouse brain neurons. *Nature.* 1987 Feb 5-11;325(6104):529-31.

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

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