
Product Data Sheet

Product Name: Sarcosine-15N

Cat. No.: GC68380

Chemical Properties

Cas. No.

Formula $C_3H_7^{15}NO_2$ M.Wt 90.09

Solubility Storage 4°C, protect from light, stored under nitrogen

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

Sarcosine-15N (N-Methylglycine-15N) is the 15N-labeled Sarcosine. Sarcosine (N-Methylglycine), an endogenous amino acid, is a competitive **glycine transporter type I (GlyT1)** inhibitor and **N-methyl-D-aspartate (NMDA) receptor** co-agonist. Sarcosine increases the glycine concentration, resulting in an indirect potentiation of the NMDA receptor. Sarcosine is commonly used for the research of schizophrenia^{[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.

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

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