Glycine-d_2

Cat. No.: HY-Y0966S1

CAS No.: 4896-75-7

Molecular Formula: $C_2H_3D_2NO_2$

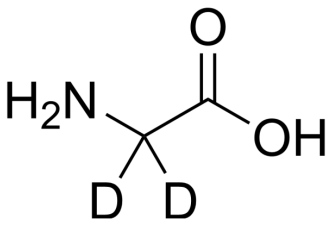
Molecular Weight: 77.08

Target: iGluR; Endogenous Metabolite; Isotope-Labeled Compounds

Pathway: Membrane Transporter/Ion Channel; Neuronal Signaling; 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

H_2O : 125 mg/mL (1621.69 mM; Need ultrasonic)

Preparing Stock Solutions

Solvent / Mass / Concentration	1 mg	5 mg	10 mg
1 mM	12.9735 mL	64.8677 mL	129.7353 mL
5 mM	2.5947 mL	12.9735 mL	25.9471 mL
10 mM	1.2974 mL	6.4868 mL	12.9735 mL

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

BIOLOGICAL ACTIVITY

Description

Glycine-d_2 is the deuterium 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.

IC_{50} & Target

NMDA Receptor

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.

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