D-Alanine-d

Cat. No.: HY-41700S2

CAS No.: 56595-54-1

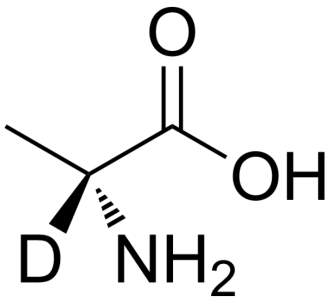
Molecular Formula: $C_3H_6DNO_2$

Molecular Weight: 90.1

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	D-Alanine-d is the deuterium labeled D-Alanine. D-Alanine is a weak GlyR (inhibitory glycine receptor) and PMBA agonist, with an EC50 of 9 mM for GlyR[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[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.

[2]. Saitoh T, et al. A novel antagonist, phenylbenzene omega-phosphono-alpha-amino acid, for strychnine-sensitive glycine receptors in the rat spinal cord. Br J Pharmacol. 1994 Sep;113(1):165-70.

[3]. Schmieden V, et al. Pharmacology of the inhibitory glycine receptor: agonist and antagonist actions of amino acids and piperidine carboxylic acid compounds. Mol Pharmacol. 1995 Nov;48(5):919-27.

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