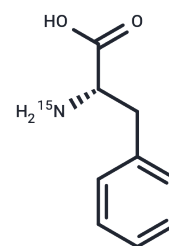


L-Phenylalanine-15N

Chemical Properties

CAS No. :	29700-34-3
Formula:	C ₉ H ₁₁ NO ₂
Molecular Weight:	166.18
Appearance:	no data available
Storage:	Powder: -20°C for 3 years In solvent: -80°C for 1 year



Biological Description

Description	L-Phenylalanine-15N ((S)-2-Amino-3-phenylpropionic acid-15N) is the 15N-labeled L-Phenylalanine. L-Phenylalanine is an essential amino acid isolated from Escherichia coli . L-Phenylalanine is a α 2 δ subunit of voltage-dependent Ca ²⁺ channels antagonist with a K _i of 980 nM. L-phenylalanine is a competitive antagonist for the glycine- and glutamate-binding sites of N-methyl-D-aspartate receptors (NMDARs) (K _B of 573 μ M) and non-NMDARs , respectively. L-Phenylalanine is widely used in the production of food flavors and pharmaceuticals.
Targets(IC50)	Calcium Channel
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. Studies involving the human use of drugs labeled with deuterium suggest that these compounds may offer some advantages when compared with their nondeuterated counterparts. Deuteration has gained attention because of its potential to affect the pharmacokinetic and metabolic profiles of drugs.

Solubility Information

Solubility	DMSO: < 1.66 mg/mL (10 mM, insoluble or slightly soluble) $\lt; \lt; 1 \text{ mg/ml}$ refers to the product slightly soluble or insoluble)
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Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	6.0176 mL	30.0879 mL	60.1757 mL
5 mM	1.2035 mL	6.0176 mL	12.0351 mL
10 mM	0.6018 mL	3.0088 mL	6.0176 mL
50 mM	0.1204 mL	0.6018 mL	1.2035 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

Reference

Russak EM, et al. Impact of Deuterium Substitution on the Pharmacokinetics of Pharmaceuticals. Ann Pharmacother. 2019;53(2):211-216.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

This product is for Research Use Only· Not for Human or Veterinary or Therapeutic Use

Tel:781-999-4286 E_mail:info@targetmol.com Address:36 Washington Street,Wellesley Hills,MA 02481