

Product Name : L-Phenylalanine

Synonyms : —

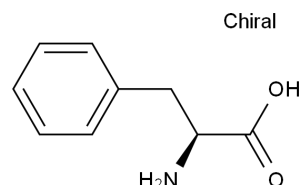
Cat No. : M15427

CAS Number : 63-91-2

Molecular Formula : C₉H₁₁NO₂

Formula Weight : 165.19

Chemical Name : —



Description : L-Phenylalanine is an antagonist at $\alpha_2\delta$ calcium channels with a K_i of 980 nM. IC₅₀ Value: 980 nM Target: Calcium Channel L-Phenylalanine (LPA) is an electrically neutral amino acid, one of the twenty common amino acids used to biochemically form proteins.

Pathway : GPCR/G Protein

Target : Calcium Channel

Receptor : $\alpha_2\delta$ calcium channels

Solubility : H₂O: $\geq$ 46 mg/ml

SMILES : N[C@@H](Cc1ccccc1)C(=O)O

Storage : (-20°C)

Stability : $\geq$ 2 years

Reference :

1. Mortell, K.H., et al., Structure-activity relationships of alpha-amino acid ligands for the alpha2delta subunit of voltage-gated calcium channels. Bioorg Med Chem Lett, 2006. 16(5): p. 1138-41. | 2. Glushakov, A.V., et al., Specific inhibition of N-methyl-D-aspartate receptor function in rat hippocampal neurons by L-phenylalanine at concentrations observed during phenylketonuria. Mol Psychiatry, 2002. 7(4): p. 359-67. | 3. Glushakov, A.V., et al., L-phenylalanine selectively depresses currents at glutamatergic excitatory synapses. J Neurosci Res, 2003. 72(1): p. 116-24. | 4. Glushakov, A.V., et al., Long-term changes in glutamatergic synaptic transmission in phenylketonuria. Brain, 2005. 128(Pt 2): p. 300-7. | 5. Moller, H.E., et al., Brain imaging and proton magnetic resonance spectroscopy in patients with phenylketonuria. Pediatrics, 2003. 112(6 Pt 2): p. 1580-3.