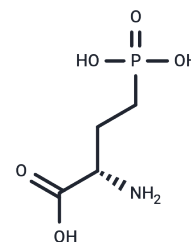


L-AP4

Chemical Properties

CAS No. : 23052-81-5
 Formula: C₄H₁₀NO₅P
 Molecular Weight: 183.1
 Storage: Powder: -20°C for 3 years | In solvent: -80°C for 1 year
Actual storage temperature shall be subject to the COA.



Biological Description

| | |
|----------------------------|---|
| Description | L-APB is an effective and specific agonist for the group III mGluRs (EC ₅₀ s: 0.13, 0.29, 1.0, 249 μM for mGlu4, mGlu8, mGlu6, and mGlu7 receptors, respectively). |
| Targets(IC ₅₀) | GluR |
| In vivo | L-APB(5 to 30 μg; intrathecal injection) obviously enhances the paw withdrawal threshold in response to the application of von Frey filaments in eight nerve-ligated rats in a dose-dependent manner. The maximal effect of L-APB appears within 45 min and gradually subsided in 120 min following intrathecal administration. Paw withdrawal threshold in response to the application of von Frey filaments before spinal nerve ligation is 22.6±2.4 g. The mechanical threshold decreases significantly (2.3±0.5 g, P<0.05) within 10 days after nerve ligation and remains stable for at least 8 weeks [2]. |

Solubility Information

| | |
|------------|---|
| Solubility | H ₂ O: 50 mg/mL (273.07 mM), Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble) |
|------------|---|

Preparing Stock Solutions

| | 1mg | 5mg | 10mg |
|-------|-----------|------------|-----------|
| 1 mM | 5.4615 mL | 27.3075 mL | 54.615 mL |
| 5 mM | 1.0923 mL | 5.4615 mL | 10.923 mL |
| 10 mM | 0.5461 mL | 2.7307 mL | 5.4615 mL |
| 50 mM | 0.1092 mL | 0.5461 mL | 1.0923 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.

Note: The dilution table applies only to solid products. For liquid products, please calculate the stock solution based on the stated concentration and/or density.

Reference

Selvam C, et al. Increased Potency and Selectivity for Group III Metabotropic Glutamate Receptor Agonists Binding at Dual sites. J Med Chem. 2018 Mar 8;61(5):1969-1989.

Chen SR, et al. Distinct roles of group III metabotropic glutamate receptors in control of nociception and dorsal horn neurons in normal and nerve-injured Rats. J Pharmacol Exp Ther. 2005 Jan;312(1):120-6.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

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