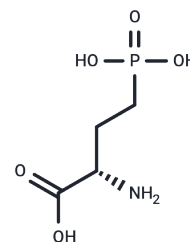


## L-AP4

## Chemical Properties

CAS No. :	23052-81-5
Formula:	C <sub>4</sub> H <sub>10</sub> NO <sub>5</sub> P
Molecular Weight:	183.1
Appearance:	no data available
Storage:	Powder: -20°C for 3 years   In solvent: -80°C for 1 year



## Biological Description

Description	L-APB is an effective and specific agonist for the group III mGluRs (EC <sub>50</sub> s: 0.13, 0.29, 1.0, 249 μM for mGlu4, mGlu8, mGlu6, and mGlu7 receptors, respectively).
Targets(IC <sub>50</sub> )	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 <sub>2</sub> O: 50 mg/mL (273.07 mM), Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
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## 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.

### 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.

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