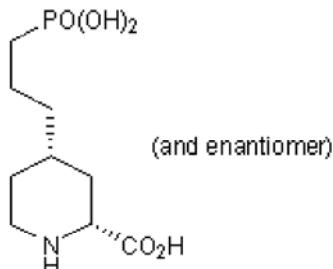


Certificate of Analysiswww.tocris.com**Product Name:** PPPA**Catalog No.:** 2274**Batch No.:** 1

CAS Number: 113190-92-4

IUPAC Name: (2R*,4S*)-4-(3-Phosphonopropyl)-2-piperidinecarboxylic acid

1. PHYSICAL AND CHEMICAL PROPERTIES**Batch Molecular Formula:** C₉H₁₈NO₅P·½H₂O**Batch Molecular Weight:** 260.23**Physical Appearance:** White solid**Solubility:** water to 100 mM**Storage:** Desiccate at RT**Batch Molecular Structure:****2. ANALYTICAL DATA****TLC:** R_f = 0.49 (Pyridine:Acetic acid:Water:Butanol [3:8:11:22])**¹H NMR:** Consistent with structure**Mass Spectrum:** Consistent with structure**Microanalysis:** Carbon Hydrogen Nitrogen

Theoretical 41.54 7.36 5.38

Found 41.8 7.29 5.64

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Product Information

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Product Name: PPPA

Catalog No.: 2274

Batch No.: 1

CAS Number: 113190-92-4

IUPAC Name: (2R*,4S*)-4-(3-Phosphonopropyl)-2-piperidinecarboxylic acid

Description:

Competitive NMDA receptor antagonist that displays moderate selectivity for NR2A-containing receptors (K_i values are 0.13, 0.47, 1.10 and 3.86 μ M for GluN2A, GluN2B, GluN2C and GluN2D subunits respectively). Please refer to IUPHAR Guide to Pharmacology for the most recent naming conventions.

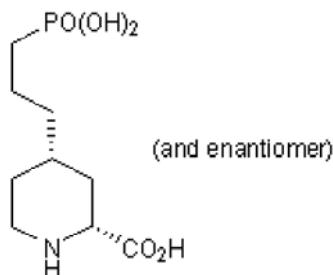
Physical and Chemical Properties:

Batch Molecular Formula: $C_9H_{18}NO_5P\cdot\frac{1}{2}H_2O$

Batch Molecular Weight: 260.23

Physical Appearance: White solid

Batch Molecular Structure:



References:

Feng et al (2005) The effect of competitive antagonist chain length on NMDA receptor subunit selectivity. *Neuropharmacology* **48** 354. PMID: 15721167.

Kinarsky et al (2005) Identification of subunit- and antagonist-specific amino acid residues in the N-methyl-D-aspartate receptor glutamate-binding pocket. *J.Pharmacol.Exp.Ther.* **313** 1066. PMID: 15743930.

Benveniste and Mayer (1992) Effect of extracellular pH on the potency of N-methyl-D-aspartic acid receptor competitive antagonists. *Mol.Pharmacol.* **42** 679. PMID: 1435743.

Storage: Desiccate at RT

Solubility & Usage Info:
water to 100 mM

Stability and Solubility Advice:

Some solutions can be difficult to obtain and can be encouraged by rapid stirring, sonication or gentle warming (in a 45-60°C water bath).

Information concerning product stability, particularly in solution, has rarely been reported and in most cases we can only offer a general guide. Our standard recommendations are:

SOLIDS: Provided storage is as stated on the product label and the vial is kept tightly sealed, the product can be stored for up to 6 months from date of receipt.

SOLUTIONS: We recommend that stock solutions, once prepared, are stored aliquoted in tightly sealed vials at -20°C or below and used within 1 month. Wherever possible solutions should be made up and used on the same day.

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