1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: $C_5H_{12}NO_5P$

Batch Molecular Weight: 197.13

Physical Appearance: White solid

Solubility:
- water to 100 mM
- phosphate buffered saline to 100 mM
- 1eq. NaOH to 100 mM
- 1eq. HCl to 100 mM

Storage: Store at RT

2. ANALYTICAL DATA

TLC: $R_f = 0.47$ (Pyridine:Acetic acid:Water:Butanol [3:8:11:14])

HPLC: Shows 100% purity

Chiral HPLC: Shows 100% purity

$^1$H NMR: Consistent with structure

Mass Spectrum: Consistent with structure

Optical Rotation: $[\alpha]_D = -26.1$ (Concentration = 1, Solvent = 6N HCl)

Microanalysis:
- Carbon
- Hydrogen
- Nitrogen

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<tr>
<th>Theoretical</th>
<th>Found</th>
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**Product Name:** D-AP5  
**Catalog No.:** 0106  
**Batch No.:** 73

**CAS Number:** 79055-68-8  
**IUPAC Name:** D-(-)-2-Amino-5-phosphonopentanoic acid

**Description:** Widely used competitive NMDA antagonist. More active form of AP5. Also agonist at quisqualate-sensitized AP6 site where it is less potent than the L-isomer, L-AP5 (Cat. No.0107). Available as part of the Mixed NMDA Receptor Tocriset™. DL Mixture and L-isomer also available.

**Physical and Chemical Properties:**
- Batch Molecular Formula: C₉H₂₀NO₅P
- Batch Molecular Weight: 197.13
- Physical Appearance: White solid
- Minimum Purity: >99%

**Storage:** Store at RT

**Solubility & Usage Info:**
- Water to 100 mM
- Phosphate buffered saline to 100 mM
- 1eq. NaOH to 100 mM
- 1eq. HCl to 100 mM

When purchased as a 1mg unit, this product is supplied as a lyophilized solid and may be very hard to visualize. Solutions should be made by adding solvent directly to the vial. The vial should then be vortexed vigorously to ensure the product has completely dissolved.

**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.

**References:**