**Product datasheet**

**D-AP5 ab120003**

**Overview**

- **Product name**: D-AP5
- **Description**: NMDA glutamate site antagonist
- **Biological description**: Competitive NMDA receptor glutamate site antagonist. More active form of DL-AP5.

Also available in simple stock solutions (ab144482) - add 1 ml of water to get an exact, ready-to-use concentration.

**Purity**: > 99%

**Properties**

- **Chemical name**: D-(-)-2-Amino-5-phosphonopentanoic acid
- **Molecular weight**: 197.13
- **Chemical structure**:

  ![Chemical structure](image)

- **Molecular formula**: C₉H₁₂NO₅P
- **CAS Number**: 79055-68-8
- **PubChem identifier**: 135342
- **Storage instructions**: Store at +4°C. Store under desiccating conditions. The product can be stored for up to 12 months.
- **Solubility overview**: Soluble in water to 100 mM
- **Handling**: Wherever possible, you should prepare and use solutions on the same day. However, if you need to make up stock solutions in advance, we recommend that you store the solution as aliquots in tightly sealed vials at -20°C. Generally, these will be useable for up to one month. Before use, and prior to opening the vial we recommend that you allow your product to equilibrate to room temperature for at least 1 hour.

Need more advice on solubility, usage and handling? Please visit our frequently asked questions (FAQ) page for more details.

- **SMILES**: N\(\text{[C@H]}(\text{CCCP} (=O)(O)O)C(=O)O\)
- **Source**: Synthetic

182 References 2 Images
Averaged Ca2+ transients (500 Hz line scans) evoked by 40 ms voltage step in a dendrite (left) and spine (right) in control (black), D-AP5 (red, 10 µM), after a 10 min washout of D-AP5 (green), and in 5 µM NMDA (blue). Mibefradil (20 µM), nimodipine (20 µM) and TTX (0.5 µM) were present throughout.

Representative voltage-clamp recording (Vh=−60 mV, ECl=+8 mV) of a Purkinje cell response to simulated ischemia and sequential block of glutamate receptors and GABAA receptors.

Please note: All products are "FOR RESEARCH USE ONLY AND ARE NOT INTENDED FOR DIAGNOSTIC OR THERAPEUTIC USE, NOT FOR USE IN HUMANS"
• Guarantee only valid for products bought direct from Abcam or one of our authorized distributors
• Abcam biochemicals are novel compounds and we have not tested their biological activity in house. Please use the literature to identify how to use these products effectively. If you require further assistance please contact the scientific support team