

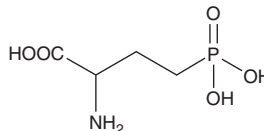
# PRODUCT INFORMATION



## DL-AP4

Item No. 29011

**CAS Registry No.:** 6323-99-5  
**Formal Name:** 2-amino-4-phosphono-butanoic acid  
**Synonyms:** NSC 30079, NSC 354086  
**MF:** C<sub>4</sub>H<sub>10</sub>NO<sub>5</sub>P  
**FW:** 183.1  
**Purity:** ≥95%  
**Supplied as:** A crystalline solid  
**Storage:** -20°C  
**Stability:** ≥4 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

### Laboratory Procedures

DL-AP4 is supplied as a crystalline solid. Aqueous solutions of DL-AP4 can be prepared by directly dissolving the crystalline solid in aqueous buffers. The solubility of DL-AP4 in PBS, pH 7.2, is approximately 1 mg/ml. We do not recommend storing the aqueous solution for more than one day.

### Description

DL-AP4 is a broad-spectrum glutamatergic antagonist.<sup>1</sup> DL-AP4 (2.5 mM) inhibits electrically stimulated synaptic transmission in rabbit hippocampal slices. It also depresses depolarizations induced by NMDA (Item No. 14581), L-homocysteate, or kainate in isolated frog spinal cord when used at a concentration of 1 mM.<sup>2</sup> DL-AP4 (0.2 mM) inhibits the accumulation of inositol induced by ibotenate (Item No. 14584), quisqualate, L-glutamate, and L-aspartate in rat hippocampal slices.<sup>3</sup>

### References

1. White, W.F., Nadler, J.V., Hamberger, A., *et al.* Glutamate as transmitter of hippocampal perforant path. *Nature* **270**(5635), 356-357 (1977).
2. Evans, R.H., Francis, A.A., Hunt, K., *et al.* Antagonism of excitatory amino acid-induced responses and of synaptic excitation in the isolated spinal cord of the frog. *Br. J. Pharmacol.* **67**(4), 591-603 (1979).
3. Nicoletti, F., Meek, J.L., Iadarola, M.J., *et al.* Coupling of inositol phospholipid metabolism with excitatory amino acid recognition sites in rat hippocampus. *J. Neurochem.* **46**(1), 40-46 (1986).

#### WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

#### SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the [complete](#) Safety Data Sheet, which has been sent via email to your institution.

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