



## CERTIFICATE OF ANALYSIS

**PRODUCT:** L-AP4  
L (+)-2-Amino-4-phosphonobutyric acid  
C<sub>4</sub>H<sub>10</sub>N<sub>0</sub>O<sub>5</sub>P, M.W. 183.10

**PRODUCT NUMBER:** A-1042

**LOT NUMBER:** A8453

**APPEARANCE:** White Crystalline Powder

**SOLUBILITY:** Soluble in dilute aqueous base.

**PURITY:** 99 % by HPLC

**MELTING POINT:** 209-212° C

**NMR:** Data confirms

**OPTICAL DATA:**  $[\alpha]^{20}_D = +25.10$  (c = 1.0, 6M HCl)

**ELEMENTAL ANALYSIS:**

<u>Theoretical</u>	<u>Actual</u>
C: 26.24	C: 26.15
H: 5.50	H: 5.73
N: 7.65	N: 7.49

**STORAGE & HANDLING:** Room Temperature. Protect from light.

CAUTION: For research use only. Not for human or drug use. The pharmacological and toxicological properties of this product have not been fully investigated. Use caution when handling. Do not use this compound if you are not fully trained or are unaware of the hazards involved.

Verified: 