



## CERTIFICATE OF ANALYSIS

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### 1. Identification

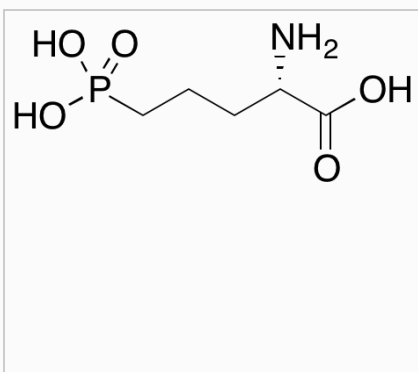
**Catalogue Number:** L300100

**CAS Number:** 79055-67-7

**Product:** L(+)-2-Amino-5-phosphonovaleric acid

**Synonym:** L-2-Amino-5-phosphonopentanoic Acid; L-2-Amino-5-phosphonovaleric Acid; L-AP5; L(+)-2-Amino-5-phosphonopentanoic Acid; (S)-2-Amino-5-phosphonopentanoic Acid; (+)-2-Amino-5-phosphonopentanoic Acid; 5-Phosphono-L-norvaline;

**Structure:**



**Molecular Formula:**

C<sub>5</sub>H<sub>12</sub>NO<sub>5</sub>P

**Molecular weight:**

197.13

**Source of Product:**

Synthetic

**Solubility:**

Aqueous Acid (Slightly),  
Water (Slightly)

**Lot Number:** 9-WAI-126-1

**Purity:** 98%

**Shipping Condition:** This Product Is Stable To Be Shipped At Room Temperature

**Storage Condition:** -20°C

### 2. Warning

**Warning 1:**

**Warning 2:**

**Warning 3:**

### 3. Analytical Information

Tests:	Specifications:	Results:
Appearance	White to Off-White Sticky Solid	Off-White Sticky Solid
NMR	Conforms to Structure	Conforms
Elemental Analysis	Conforms	%C: 27.64, %H: 6.65, %N: 7.36
MS	Conforms to Structure	Conforms
Specific Rotation	Report Result	+20.3° (c = 0.2, 6N HCl)
P NMR	Conforms to Structure	Conforms
HPLC Purity	Report Result	99.86% (ELSD)

**Additional Information:** N/A

Purity is based on the analytical results of the tests performed. NMR and Elemental Analysis (if available) may have an accuracy of ± 2%. Isotopic purity is based on mass distribution observed. The contents of the specifications are subject to change without advance notice, and the specification values displayed here are the most up to date values.

### 4. Signatures

Reviewed By	Reviewed By	C of A Approved By	Test Date	Retest Date
Nicole Yip	Toni Rantanen	Christina Gouliaras	7/14/2023	7/12/2027