

# Certificate of Analysis

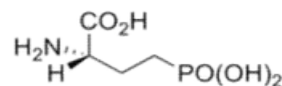


## Product Identification

**Catalog number** HB0370  
**Compound name** L-AP4  
**Chemical name** L-(+)-2-Amino-4-phosphonobutyric acid

**Batch number** E2257-2-17  
**Batch molecular formula** C<sub>4</sub>H<sub>10</sub>NO<sub>5</sub>P·H<sub>2</sub>O  
**Batch molecular weight** 201.12

## Chemical Structure



## Method

## QC requirement

## QC Result

<b>HPLC</b>	Chiral HPLC shows >99% purity	Meets specification: 100%
<b>NMR</b>	<sup>1</sup> H NMR in D <sub>2</sub> O at 400 MHz consistent with structure and shows <1% of any impurity	Meets specification
<b>Mass spectrum</b>	Electrospray negative analysis consistent with structure	Meets specification
<b>Microanalysis</b>	Elemental analysis is within 0.4% for the batch molecular formula	Meets specification
<b>TLC</b>	TLC analysis in 1:1 PAW:BuOH shows one spot under ninhydrin	Meets specification: R <sub>f</sub> =0.5
<b>Physical appearance</b>	White to off-white solid	Meets specification: White solid
<b>Solubility</b>	Soluble in water (5 mM) and in 0.1M NaOH (100 mM)	Meets specification

**Produced by** Richard Patterson

Signature

**Passed by** Huw Davies

Signature

Date

06/11/2023

This product is for RESEARCH USE ONLY and is not intended for therapeutic or diagnostic use. Not for human or veterinary use.