

Certificate of Analysis



Product Identification		Chemical Structure
Catalog number	HB0225	
Compound name	D-AP5	
Chemical name	D-(-)-2-Amino-5-phosphonopentanoic acid	
Batch number	E0714-4-2	
Batch molecular formula	C ₅ H ₁₂ NO ₅ P·0.25H ₂ O	
Batch molecular weight	201.63	

Method	QC requirement	QC Result
HPLC	Chiral HPLC shows >98% purity	Meets specification: 99.3%
NMR	¹ H NMR in D ₂ O at 400 MHz consistent with structure and shows <1% of any impurity	Meets specification
Mass spectrum	Electrospray positive analysis consistent with structure	Meets specification
Microanalysis	Elemental analysis is within 0.4% for the batch molecular formula	Meets specification
Optical rotation	Specific rotation in 6M HCl measured between -22° and -28°	Meets specification: [α] _D = -22° (c=1, 6M HCl)
TLC	TLC analysis in 50% PAW/BuOH shows one spot under ninhydrin	Meets specification: R _f =0.2
Physical appearance	White to off-white solid	Meets specification: White solid
Solubility	Soluble in water (100 mM)	Meets specification

Produced by

Signature

Passed by

Signature

Date

11-04-18

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