

ALADDIN SCIENTIFIC CORPORATION
 14078 Meridian Parkway, Riverside, CA. 92518

Certificate of Analysis

Date of Testing: 2025-09-23 13:57:55
 Date of Next Testing: 2029-09-22 13:57:55
 Product Name: **L-Phenylalanine**
 CAS Number: 63-91-2
 Specifications & Purity: Animal Free, USP, JP, Moligand™, Ph.Eur., for cell culture, ≥98.5%
 Lot #: I2516027
 SKU #: **P110425**
 Version: **3**
 Analysis #: **089508**
 Storage Temperature: Protected from light, Desiccated

Parameter	Limit Values	Result
Bacterial endotoxins	0-25 (EU/g)	12.50 EU/g
(As)Arsenic	0-1 (ppm)	0.38 ppm
specific Rotation $[\alpha]_{20/D}(c=2 \text{ in H}_2\text{O EP})$	-35--33.5 (°)	-34.57°
PH test	5.4-6	5.70
Chloride	0-0.02 (%)	0.01 %
Sulfate(SO42-)	0-0.02 (%)	0.01 %
Ammonia (NH4)	0-0.02 (%)	0.01 %
Other amino acids	0-0.5 (%)	0.29 %
specific Rotation $[\alpha]_{25/D}(c=2 \text{ in H}_2\text{O USP})$	-34.7--32.7 (°)	-34.15°
Loss on drying	0-0.2 (%)	0.01 %
Heavy metal (as Pb)	0-10 (ppm)	3.50 ppm
Ignition Residue (as sulfate)	0-0.1 (%)	0.05 %
Iron(Fe)	0-10 (ppm)	6.31 ppm
Assay(Titration by HClO4)	98.5-101 (%)	99.99 %
Appearance (P110425)	White crystal powder	White crystal powder
Cell Culture Test	pass	Pass
Infrared spectrum	Conforms to Structure	Conforms to Structure
Ninhydrin-positive substances (other amino acids)	Conforms	Conforms
Origin	non-animal source	non-animal source
Residual solvents	complies	complies
Solubility,0.5g to 10ml of 1m hyd	Clear colorless	Clear Colorless



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A handwritten signature in black ink that reads "John Su". The signature is written in a cursive, flowing style.

John Su
QA & QC Manager