

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

Certificate of Analysis

Date of Testing: 2025-11-26 16:07:48
 Date of Next Testing: 2029-11-25 16:07:48
 Product Name: **L-Phenylalanine**
 CAS Number: 63-91-2
 Specifications & Purity: Animal Free, USP, JP, Moligand™, Ph.Eur., for cell culture, ≥98.5%
 Lot #: K2524527
 SKU #: **P110425**
 Version: **3**
 Analysis #: **607161**
 Storage Temperature: Protected from light, Room temperature, Desiccated

Parameter	Limit Values	Result
(As)Arsenic	0-2 (ppm)	0.00000 ppm
PH test	5.4-6	5.49000
Chloride	0-0.02 (%)	0.00260 %
Sulfate(SO42-)	0-0.02 (%)	0.00000 %
Heavy metal (as Pb)	0-10 (ppm)	0.00000 ppm
Ignition Residue (as sulfate)	0-0.1 (%)	0.07610 %
Iron(Fe)	0-10 (ppm)	0.00000 ppm
Assay(Titration by HClO4)	98.5-101 (%)	99.19000 %
Loss on drying	0-0.3 (%)	0.00000 %
Bacterial endotoxins	0-1000 (EU/g)	25.60000 EU/g
specific Rotation[a]20/D(c=2 in H2O EP)	-35--33.5 (°)	-33.52000 °
Ammonia (NH4)	0-0.02 (%)	0.02000 %
Other amino acids	0-0.5 (%)	0.00000 %
specific Rotation[a]25/D(c=2 in H2O USP)	-34.7--32.7 (°)	-32.81000 °
Appearance (P110425)	White crystal powder	White crystal powder
Solubility in hot Water, almost transparency, Clear colorless	pass	Pass
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



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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