

ALADDIN SCIENTIFIC CORPORATION

14078 Meridian Parkway, Riverside, CA. 92518

## Certificate of Analysis

Date of Testing: 2026-03-17 15:45:35

Date of Next Testing: 2030-03-16 15:45:35

Product Name: **L-Phenylalanine**

CAS Number: 63-91-2

Specifications & Purity: Animal Free, USP, JP, Moligand™, Ph.Eur., for cell culture, ≥98.5%

Lot #: C2609480

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[α]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[α]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              |



QualityAssurance@aladdinsci.com

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A handwritten signature in black ink that reads "John Su".

John Su  
QA & QC Manager