

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

Certificate of Analysis

Date of Testing: 2026-01-26 11:37:53
 Date of Next Testing: 2030-01-25 11:37:53
 Product Name: **L-Tryptophan**
 CAS Number: 73-22-3
 Specifications & Purity: Animal Free, USP, JP, Moligand™, Ph.Eur., for cell culture, ≥99%
 Lot #: A2622502
 SKU #: **T118579**
 Version: **1**
 Analysis #: **631789**
 Storage Temperature: Room temperature

| Parameter | Limit Values | Result |
|--|---|---|
| Ammonia (NH4) | 0-0.02 (%) | 0.01 % |
| Chloride | 0-0.02 (%) | 0.00 % |
| PH test(1% in water) | 3-3.5 | 3.23 |
| (As)Arsenic | 0-1 (ppm) | 0.00 ppm |
| Ignition Residue | 0-0.1 (%) | 0.00 % |
| Iron(Fe) | 0-20 (ppm) | 1.20 ppm |
| Heavy metals | 0-10 (ppm) | 0.00 ppm |
| Sulfate(SO42-) | 0-0.02 (%) | 0.00 % |
| Endotoxin Assay | 0-1 (EU/mg) | 0.15 EU/mg |
| Specific Rotation [α] ₂₀ /D(0.1g /10mL 1M HCl)EP and JP | -32.5--30.5 (°) | -31.53 ° |
| Specific Rotation [α] ₂₀ /D(c=1 H ₂ O) | -32.8--29.4 (°) | -32.60 ° |
| loss on drying(105°C,3 h) | 0-0.3 (%) | 0.16 % |
| Assay(dry basis) | 99-100.5 (%) | 100.48 % |
| Appearance (T118579) | white to yellow crystals,powder,crystalline powder | white to yellow crystals,powder,crystalline powder |
| Cell Culture Test | pass | Pass |
| Ninhydrin-positive substances (other amino acids) | Conforms | Conforms |
| Origin | non-animal source | non-animal source |
| Residual solvents | complies | complies |
| Solubility,Clear , 0.5 g to 20 mL of 2M HCl | pass | Pass |
| Infrared spectrum | Conforms to Structure | Conforms to Structure |



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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