

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

## Certificate of Analysis

Date of Testing: 2025-06-06 09:53:00  
 Date of Next Testing: 2029-06-05 09:53:00  
 Product Name: **L-Tryptophan**  
 CAS Number: 73-22-3  
 Specifications & Purity: Animal Free, USP, JP, Moligand™, Ph.Eur., for cell culture, ≥99%  
 Lot #: F2505577  
 SKU #: **T118579**  
 Version: **1**  
 Analysis #: **502130**  
 Storage Temperature: Room temperature

Parameter	Limit Values	Result
Ammonia (NH4)	0-0.02 (%)	0.00 %
Chloride	0-0.02 (%)	0.01 %
PH test(1% in water)	3-3.5	3.25
(As)Arsenic	0-1 (ppm)	0.00 ppm
Iron(Fe)	0-20 (ppm)	0.02 ppm
Heavy metals	0-10 (ppm)	0.00 ppm
Sulfate(SO42-)	0-0.02 (%)	0.00 %
Specific Rotation [α] <sub>20</sub> /D(0.1g/10mL 1M HCl)EP and JP	-32.5--30.5 (°)	-31.05 °
Specific Rotation [α] <sub>20</sub> /D(c=1 H2O)	-32.8--29.4 (°)	-31.89 °
Ignition Residue	0-0.1 (%)	0.00 %
Endotoxin Assay	0-1 (EU/mg)	0.01 EU/mg
Assay(dry basis)	99-100.5 (%)	100.45 %
loss on drying(105°C,3 h)	0-0.3 (%)	0.24 %
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".

John Su  
QA & QC Manager