

ALADDIN SCIENTIFIC CORPORATION

14078 Meridian Parkway, Riverside, CA. 92518

## Certificate of Analysis

Date of Testing: 2026-06-02 16:32:25  
Date of Next Testing: 2029-06-01 16:32:25  
Product Name: **L-Serine**  
CAS Number: 56-45-1  
Specifications & Purity: Animal Free, USP, Moligand™, Ph.Eur., for cell culture, ≥98.5%  
Lot #: E2622392  
SKU #: **L476400**  
Version: **1**  
Analysis #: **701128**  
Storage Temperature: Room temperature

Parameter	Limit Values	Result
Specific Rotation(25 deg C, C=10 in 2 M HCl, USP)	14.0-15.6 (°)	15.36000°
Chloride Content	0-0.02 (%)	0.00000 %
Sulfate(SO42-)	0-0.02 (%)	0.00000 %
Iron(Fe)	0-10 (ppm)	0.00000 ppm
Arsenic(As)	0-1 (ppm)	0.00000 ppm
Loss on drying	0-0.2 (%)	0.08360 %
Residue on ignition(Ash)	0-0.1 (%)	0.02910 %
PH (10% Water)	5.2-6.2	5.34000
Endotoxin Assay	0-1 (EU/mg)	0.01250 EU/mg
Ammonium (NH4)	0-0.02 (%)	0.02000 %
Assay(dry basis)	98.5-101.0 (%)	98.87000 %
Appearance(L476400)	White Powder	White powder
Solubility(0.5 g to 10 ml of H2O)Colorless Clear	pass	Pass
Infrared spectrum	Conforms to Structure	Conforms to Structure
Origin(Must be a non-animal source)	Conforms	Conforms
Ninhydrin-Positive Substances(other amino acids)	Conforms	Conforms
Residual Solvents	Meets Requirements	Meets Requirements
Cell Culture Test	pass	Pass



QualityAssurance@aladdinsci.com

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

John Su  
QA & QC Manager