

Certificate of Analysis

Date of Testing:	2024-07-20 10:22:20
Date of Next Testing:	2028-07-19 10:22:20
Product Name:	L-Cysteine
CAS Number:	52-90-4
Specifications & Purity:	≥98%,from non-animal source,for cell culture
Lot #:	G2411596
SKU #	C108238
Version	0
Analysis #:	373730
Storage Temperature:	Store at 2-8°C,Argon charged

Parameter	Limit Values	Result
Sulfate(SO42-)	0-0.03 (%)	0.01%
(As)Arsenic	0-1 (ppm)	0.50 ppm
Assay	98-100 (%)	99.80%
Iron(Fe)	0-10 (ppm)	9.00 ppm
Ammonia (NH4)	0-0.02 (%)	0.01%
Heavy metal (as Pb)	0-10 (ppm)	9.00 ppm
Chloride (Cl-)	0-0.04 (%)	0.02%
Specific Rotation [α] ₂₀ /D(c=8 in 1 M HCl)	8.3-9.5 (°)	8.70°
Endotoxin Assay	0-1 (EU/mg)	0.50 EU/mg
Appearance (C108238)	White Powder or Crystals	White Powder or Crystals
Infrared spectrum	Conforms to Structure	Conforms to Structure
Cell Culture Test	pass	Pass
Cell Line test	Attached Cell Line	Attached Cell Line
Solubility in H ₂ O , Clear Colorless ,c = 25mg/ml, H ₂ O	pass	Pass



ALADDIN SCIENTIFIC CORPORATION

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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