

## Certificate of Analysis

Date of Testing: 2023-11-13 10:47:04

Date of Next Testing: 2027-11-12 10:47:04

Product Name: **L-Cysteine**

CAS Number: 52-90-4

Specifications & Purity: ≥98%,from non-animal source,for cell culture

Lot #: K2307438

SKU #: **C108238**

**Analysis:** **289559**

Storage Temperature: Store at 2-8°C,Argon charged

Parameter	Limit Values	Result
Sulfate(SO42-)	0-0.03 (%)	0.02 %
(As)Arsenic	0-1 (ppm)	0.96 ppm
Assay	98-100 (%)	99.60 %
Iron(Fe)	0-10 (ppm)	9.20 ppm
Heavy metal (as Pb)	0-10 (ppm)	9.20 ppm
Chloride (Cl-)	0-0.04 (%)	0.02 %
Ammonia (NH4)	0-0.02 (%)	0.02 %
Specific Rotation [α] <sub>20</sub> /D(c=8 in 1 M HCl)	8.3-9.5 (°)	8.50 °
Endotoxin Assay	0-1 (EU/mg)	0.90 EU/mg
Cell Culture Test	pass	Pass
Cell Line test	Attached Cell Line	Attached Cell Line
Infrared spectrum	Conforms to Structure	Conforms to Structure
Appearance (C108238)	White Powder or Crystals	White Powder or Crystals
Solubility in H2O , Clear Colorless ,c = 25mg/ml, H2O	pass	Pass



John Su  
QA & QC Manager