

Certificate of Analysis

Date of Testing: 2025-05-19 16:01:55
 Date of Next Testing: 2029-05-18 16:01:55
 Product Name: **L-Cystine**
 CAS Number: 56-89-3
 Specifications & Purity: Moligand™, Animal Free, Ph.Eur., for cell culture
 Lot #: H2110151
 SKU #: **C118619**
 Version: **0**
 Analysis #: **510670**

Parameter	Limit Values	Result
Endotoxin Assay	0-50 (EU/g)	24.20 EU/g
Chloride	0-0.02 (%)	0.00 %
Iron(Fe)	0-10 (ppm)	2.60 ppm
Heavy metal (as Pb)	0-10 (ppm)	1.56 ppm
Specific Rotation [α] ₂₀ /D(c=2 in 1N HCl in dried basis)	-224--218 (°)	-223.90 °
Sulfate Ash	0-0.1 (%)	0.03 %
Purity(HPLC)	98.5-100 (%)	98.70000 %
Sulfate(SO ₄ ²⁻)	0-0.03 (%)	0.00 %
Ammonia (NH ₄)	0-200 (ppm)	111.20 ppm
Loss on drying	0-0.5 (%)	0.00 %
Appearance (C118619)	White Powder or Crystals	White Powder or Crystals
Cytotoxicity	Pass	Pass
Infrared spectrum	Conforms to Structure	Conforms to Structure
Ninhydrin-Positive Substances	Conforms	Conforms
Origin	non-animal source	non-animal source
Residual solvents	complies	complies



ALADDIN SCIENTIFIC CORPORATION

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

John Su
QA & QC Manager