

ALADDIN SCIENTIFIC CORPORATION

14078 Meridian Parkway, Riverside, CA. 92518

Certificate of Analysis

Date of Testing: 2025-02-17 11:08:51
 Date of Next Testing: 2029-02-16 11:08:51
 Product Name: **L(+)-Glutamic acid**
 CAS Number: 56-86-0
 Specifications & Purity: Animal Free, USP, JP, Ph.Eur., for cell culture, ≥98.5%
 Lot #: B2514383
 SKU #: **G107510**
 Version: **4**
 Analysis #: **442455**
 Storage Temperature: Room temperature

Parameter	Limit Values	Result
(As)Arsenic	0-1 (ppm)	0.00000 ppm
Loss on drying	0-0.1 (%)	0.10000 %
Endonuclease Detection	0-0.1 (EU/g)	0.00200 EU/g
Iron(Fe)	0-10 (ppm)	0.00000 ppm
Ignition Residue (as sulfate)	0-0.1 (%)	0.00000 %
Chloride	0-0.02 (%)	0.00210 %
Heavy metal (as Pb)	0-10 (ppm)	0.00000 ppm
Sulfate(SO42-)	0-0.02 (%)	0.00000 %
PH test	3-3.5	3.00000
Ammonia (NH4)	0-0.02 (%)	0.01900 %
Assay(dry basis)	98.5-101 (%)	99.39000 %
Specific Rotation [α] ₂₀ /D(c=10 in 2N HCl)	31.5-32.5 (°)	31.51400°
Appearance (G107510)	White powder	White powder
Solubility, Colorless, Clear, 1.0 g to 10 ml of 2 M HCl	pass	Pass
Cell Culture Test	pass	Pass
Infrared spectrum	Conforms to Structure	Conforms to Structure
Ninhydrin-positive substances (other amino acids)	Conforms	Conforms
Residual solvents	complies	complies



QualityAssurance@aladdinsci.com

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

John Su
QA & QC Manager