

ALADDIN SCIENTIFIC CORPORATION

14078 Meridian Parkway, Riverside, CA. 92518

Certificate of Analysis

Date of Testing:	2024-11-15 11:40:29
Date of Next Testing:	2028-11-14 11:40:29
Product Name:	L-Arginine hydrochloride
CAS Number:	1119-34-2
Specifications & Purity:	PharmPure™, USP, JP, Ph.Eur., for cell culture, ≥98.5%
Lot #:	K2413159
SKU #	A103485
Version	1
Analysis #:	428438
Storage Temperature:	Argon charged, Desiccated

Parameter	Limit Values	Result
Loss on drying	0-0.2 (%)	0.07 %
Heavy metal (as Pb)	0-10 (ppm)	0.00 ppm
Iron(Fe)	0-10 (ppm)	0.00 ppm
Ignition Residue (as sulfate)	0-0.1 (%)	0.00 %
Endotoxin Assay	0-1 (EU/mg)	0.03 EU/mg
Sulfate(SO42-)	0-0.02 (%)	0.01 %
PH test(1.0g in 10ml water)	4.7-6.2	5.28
(As)Arsenic	0-1 (ppm)	0.00 ppm
Ammonia (NH4)	0-0.02 (%)	0.02 %
Purity(titration with AgNO3)(dry basis)	98.5-100 (%)	98.90 %
Specific Rotation [α] ₂₀ /D(c=8 in 6M HCl)	22.1-22.9 (°)	22.89°
Appearance (A103485)	white crystalline powder	white crystalline powder
Solubility in H ₂ O , Colorless , Clear , 100 mg in 1 mL H ₂ O	pass	Pass
Cell Culture Test	pass	Pass
Infrared spectrum	Conforms to Structure	Conforms to Structure
Ninhydrin-positive substances (other amino acids)	Conforms	Conforms
Origin	non-animal source	non-animal source
Residual solvents	complies	complies



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

John Su
QA & QC Manager