

ALADDIN SCIENTIFIC CORPORATION

14078 Meridian Parkway, Riverside, CA. 92518

## Certificate of Analysis

Date of Testing:	2022-12-12 13:05:17
Date of Next Testing:	2026-12-11 13:05:17
Product Name:	<b>L-Asparagine Monohydrate</b>
CAS Number:	5794-13-8
Specifications & Purity:	non-animal source, for cell culture, ≥99.0%
Lot #:	L2206017
SKU #	<b>A119452</b>
Version	<b>0</b>
<b>Analysis #:</b>	<b>150706</b>
Storage Temperature:	Protected from light

Parameter	Limit Values	Result
Iron(Fe)	0-10 (ppm)	5.30 ppm
Ignition Residue(Ash)	0-0.1 (%)	0.03 %
Chloride	0-0.02 (%)	0.01 %
Sulfate(SO42-)	0-0.02 (%)	0.01 %
Ammonia (NH4)	0-0.1 (%)	0.00 %
Purity(HPLC)	99-100 (%)	99.36000 %
Loss on drying	11.5-12.5 (%)	11.96 %
Heavy metal (as Pb)	0-10 (ppm)	1.40 ppm
Specific Rotation [α] <sub>20</sub> /D(c=10 in 6M HCl in dried basis)	33-36.5 (°)	33.02°
Endotoxin Assay	0-1 (EU/mg)	0.50 EU/mg
Ninhydrin-Positive Substances	Conforms	Conforms
Solubility in H <sub>2</sub> O , Colorless,Clear,1g/50ml	pass	Pass
Appearance (A119452)	white crystalline powder	white crystalline powder
Cell Culture Test	pass	Pass
Infrared spectrum	Conforms to Structure	Conforms to Structure



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

John Su  
QA & QC Manager