

ALADDIN SCIENTIFIC CORPORATION

14078 Meridian Parkway, Riverside, CA. 92518

Certificate of Analysis

Date of Testing:	2023-06-09 08:43:49
Date of Next Testing:	2026-06-08 08:43:49
Product Name:	L-Asparagine
CAS Number:	70-47-3
Specifications & Purity:	Moligand™, BioReagent, for cell culture, for insect cell culture
Lot #:	F2305340
SKU #	L478521
Version	1
Analysis #:	227085
Storage Temperature:	Argon charged

Parameter	Limit Values	Result
Water by Karl Fischer	0-2 (%)	0.17%
Purity(HPLC area)	98-100 (%)	98.75%
Specific rotation $[\alpha]_{20/D}(C=13.2 \text{ in } 1 \text{ N HCl})$	27-31 (°)	29.25900°
Solubility in 1 N HCl,Colorless Clear 100 mg/ml	Pass	Pass
Cell Culture Test	pass	Pass
Insect Cell Test	Pass	Pass
Proton NMR spectrum	Conforms to Structure	Conforms to Structure
Appearance(L478521)	White to Almost white powder to crystal	White to Almost white powder to crystal



John Su
QA & QC Manager