

ALADDIN SCIENTIFIC CORPORATION

14078 Meridian Parkway, Riverside, CA. 92518

Certificate of Analysis

Date of Testing: 2023-12-05 11:31:01

Date of Next Testing: 2027-12-04 11:31:01

Product Name: **D-Norvaline**

CAS Number: 2013-12-9

Specifications & Purity: 99%

Lot #: K2329031

SKU #: **N106191****Analysis: 143468**

Parameter	Limit Values	Result
Purity(NonaqueousTitration)	98.5-101.5 (%)	99.17%
Specific Rotation [α] ₂₀ /D(c=10 in 5M HCL)	-26--20 (°)	-21.67°
Enantiometric Excess	98-100 (%)	98.50%
Appearance (N106191)	White Powder, Crystals, Granules and/or Lumps	White Powder, Crystals, Granules and/or Lumps
Proton NMR spectrum	Conforms to Structure	Conforms to Structure

John Su
QA & QC Manager