

ALADDIN SCIENTIFIC CORPORATION

14078 Meridian Parkway, Riverside, CA. 92518

## Certificate of Analysis

Date of Testing: 2022-11-08 18:04:52

Date of Next Testing: 2026-11-07 18:04:52

Product Name: **D-Norvaline**

CAS Number: 2013-12-9

Specifications &amp; Purity: 99%

Lot #: J2229358

SKU #: **N106191****Analysis: 123944**

Parameter	Limit Values	Result
Specific Rotation [α] <sub>20</sub> /D(c=10 in 5M HCL)	-26--20 (°)	-21.97°
Purity(Nonaqueous Titration)	98.5-101.5 (%)	100.02 %
Enantiometric Excess	98-100 (%)	98.01 %
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