

ALADDIN SCIENTIFIC CORPORATION

14078 Meridian Parkway, Riverside, CA. 92518

## Certificate of Analysis

Date of Testing: 2022-11-23 14:54:09  
Date of Next Testing: 2026-11-22 14:54:09  
Product Name: **L-Threonine**  
CAS Number: 72-19-5  
Specifications & Purity: 99%  
Lot #: K2218740  
SKU #: **T108221**  
Version: **1**  
Analysis #: **127691**  
Storage Temperature: Desiccated

Parameter	Limit Values	Result
Ignition Residue	0-0.1 (%)	0.00 %
Purity(HPLC)	99-100 (%)	99.52200 %
Carbon by Elemental Analysis	39.6-41.1 (%)	40.62 %
Specific Rotation [ $\alpha$ ] <sub>20</sub> /D(c=6 in H <sub>2</sub> O)	-29--27.5 (°)	-28.33 °
Nitrogen by Elemental Analysis	11.5-13.1 (%)	12.65 %
Loss on drying	0-0.2 (%)	0.11 %
Appearance (T108221)	White to off-white powder, needles and/or Chunks	White to off-white powder, needles and/or Chunks
Solubility,Colorless and clear(5% in H <sub>2</sub> O)	pass	Pass
Infrared spectrum	Conforms to Structure	Conforms to Structure



John Su  
QA & QC Manager