

ALADDIN SCIENTIFIC CORPORATION

14078 Meridian Parkway, Riverside, CA. 92518

## Certificate of Analysis

Date of Testing: 2023-05-13 17:40:55  
Date of Next Testing: 2025-05-12 17:40:55  
Product Name: **D-Leucine tert-Butyl Ester Hydrochloride**  
CAS Number: 13081-32-8  
Specifications & Purity:  $\geq 98.0\%$   
Lot #: E23101045  
SKU #: **S138145**  
**Analysis:** **169915**  
Storage Temperature: Argon charged

| Parameter  | Limit Values                            | Result                                  |
|--|---|---|
| Purity(HPLC)   | 98-100 (%)                              | 99.01700 %                              |
| Specific Rotation $[\alpha]_{20/D(c=2 \text{ in DMF})}$ -13--9 (°) |   | -10.52 °                                |
| Purity (Argentometric Titration)                                   | 97.5-102.5 (%)                          | 102.38 %                                |
| Appearance (S138145)   | White to Almost white powder to crystal | White to Almost white powder to crystal |
| Proton NMR spectrum  | Conforms to Structure                   | Conforms to Structure                   |



John Su  
QA & QC Manager