

ALADDIN SCIENTIFIC CORPORATION

14078 Meridian Parkway, Riverside, CA. 92518

## Certificate of Analysis

Date of Testing: 2023-07-07 17:20:28  
Date of Next Testing: 2025-07-06 17:20:28  
Product Name: **N-(tert-Butoxycarbonyl)-3,4-difluoro-L-phenylalanine**  
CAS Number: 198474-90-7  
Specifications & Purity:  $\geq 95\%$   
Lot #: J2115441  
SKU #: **B133167**  
Analysis: **248715**

Parameter	Limit Values	Result
Specific Rotation $[\alpha]_{20}^D(c=1 \text{ in MeOH})$	4-6.5 ( $^{\circ}$ )	6.24 $^{\circ}$
Purity(HPLC)	95-100 (%)	95.96100 %
Purity(Neutralization titration)	94.5-105.5 (%)	98.34 %
Appearance (B133167)	White to Light Yellow Powder or Crystals	White to Light Yellow Powder or Crystals
Fluorine NMR Spectrum	Conforms to Structure	Conforms to Structure
Proton NMR spectrum	Conforms to Structure	Conforms to Structure



John Su  
QA & QC Manager