

ALADDIN SCIENTIFIC CORPORATION

14078 Meridian Parkway, Riverside, CA. 92518

## Certificate of Analysis

Date of Testing: 2024-10-11 14:28:53  
Date of Next Testing: 2027-10-11 14:28:53  
Product Name: (2R) -2,4-Morpholine dicarboxylic acid 4-tert butyl ester  
CAS Number: 884512-77-0  
Specifications & Purity: 97%  
Lot #: J2409808  
SKU #: R195541  
Version: 1  
Analysis #: 372070  
Storage Temperature: Store at 2-8°C

| Parameter   | Limit Values          | Result                |
|---|-----------------------|-----------------------|
| Purity(HPLC area)                                   | 97-100 (%)            | 99.29%                |
| Specific Rotation [α] <sub>20</sub> /D(c=1 in MeOH) | -54.4~-50.4 (°)       | -50.50°               |
| NMR Spectrum 1H                                     | Conforms to Structure | Conforms to Structure |



John Su  
QA & QC Manager