

ALADDIN SCIENTIFIC CORPORATION

14078 Meridian Parkway, Riverside, CA. 92518

## Certificate of Analysis

Date of Testing: 2022-12-10 15:47:46  
 Date of Next Testing: 2024-12-09 15:47:46  
 Product Name: **N-(9-Fmoc)-L-glutamic acid  $\gamma$ -tert-butyl ester monohydrate**  
 CAS Number: 204251-24-1  
 Specifications & Purity:  $\geq 98\%$   
 Lot #: L2201262  
 SKU #: **F132953**  
 Version: **0**  
 Analysis #: **150207**  
 Storage Temperature: Store at 2-8°C

| Parameter                                                             | Limit Values              | Result                    |
|-----------------------------------------------------------------------|---------------------------|---------------------------|
| Water by Karl Fischer                                                 | 0-5 (%)                   | 3.99480 %                 |
| Specific Rotation $[\alpha]_{20/D}(c=1 \text{ in } 80\% \text{AcOH})$ | -6.5--3.5 (°)             | -3.55300 °                |
| Purity(HPLC)                                                          | 98-100 (%)                | 98.95500 %                |
| Appearance (F132953)                                                  | white powder and/or lumps | white powder and/or lumps |
| Proton NMR spectrum                                                   | Conforms to Structure     | Conforms to Structure     |



John Su  
QA & QC Manager