

ALADDIN SCIENTIFIC CORPORATION

14078 Meridian Parkway, Riverside, CA. 92518

# Certificate of Analysis

Date of Testing: 2025-09-18 15:13:24

Date of Next Testing: 2028-09-17 15:13:24

Product Name: **Boc-D-pyroglutamic acid methyl ester**

CAS Number: 128811-48-3

Specifications & Purity:  $\geq 98\%$

Lot #: L2209750

SKU #: **R190465**

Version: **0**

Analysis #: **573410**

Storage Temperature: Room temperature

| Parameter                                                      | Limit Values                           | Result                                 |
|----------------------------------------------------------------|----------------------------------------|----------------------------------------|
| Specific Rotation $[\alpha]_{20/D}(c=1.039 \text{ in CHCl}_3)$ | 29.5-33.5 (°)                          | 32.16°                                 |
| Purity(HPLC)                                                   | 98-100 (%)                             | 99.87000 %                             |
| Melting point                                                  | 67-72 (°C)                             | 70.50000 °C                            |
| Appearance (R190465)                                           | White to Off-White to Faint Red Powder | White to Off-White to Faint Red Powder |
| Proton NMR spectrum                                            | Conforms to Structure                  | Conforms to Structure                  |



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QA & QC Manager