

ALADDIN SCIENTIFIC CORPORATION

14078 Meridian Parkway, Riverside, CA. 92518

Certificate of Analysis

Date of Testing: 2023-07-07 11:49:00

Date of Next Testing: 2027-07-06 11:49:00

Product Name: **Ethyl N-(tert-Butoxycarbonyl)-D-pyroglutamate**

CAS Number: 144978-35-8

Specifications & Purity: $\geq 95\%$ (HPLC)

Lot #: G2308163

SKU #: **E156111**

Version: **0**

Analysis #: **248380**

Storage Temperature: Room temperature

Parameter	Limit Values	Result
Purity(HPLC)	95-100 (%)	97.32920 %
Specific Rotation $[\alpha]_{20/D}(c=1 \text{ in MeOH})$	44-47 (°)	45.78500 °
Melting point	54-58 (°C)	55.08600 °C
Appearance (E156111)	White to Off-White Powder	White to Off-White Powder
Proton NMR spectrum	Conforms to Structure	Conforms to Structure



John Su
QA & QC Manager