

ALADDIN SCIENTIFIC CORPORATION

14078 Meridian Parkway, Riverside, CA. 92518

Certificate of Analysis

Date of Testing: 2024-04-27 16:54:14
 Date of Next Testing: 2028-04-26 16:54:14
 Product Name: **Ethyl N-(tert-Butoxycarbonyl)-D-pyroglutamate**
 CAS Number: 144978-35-8
 Specifications & Purity: $\geq 95\%$ (HPLC)
 Lot #: D2418495
 SKU #: **E156111**
 Version: **0**
 Analysis #: **338089**
 Storage Temperature: Room temperature

Parameter	Limit Values	Result
Purity(HPLC)	95-100 (%)	99.68200 %
Specific Rotation $[\alpha]_{20/D(c=1 \text{ in MeOH})}$	44-47 (°)	44.16300 °
Melting point	54-58 (°C)	56.02000 °C
Proton NMR spectrum	Conforms to Structure	Conforms to Structure
Appearance (E156111)	White to Almost white powder to crystal	White to Almost white powder to crystal



John Su
QA & QC Manager