

Certificate of Analysis

Date of Testing: 2025-03-06 16:27:36

Date of Next Testing: 2028-03-05 16:27:36

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

CAS Number: 128811-48-3

Specifications & Purity: $\geq 98\%$

Lot #: F2209245

SKU #: **R190465**

Version: **0**

Analysis #: **480197**

Storage Temperature: Room temperature

Parameter	Limit Values	Result
Specific Rotation $[\alpha]_{20/D}(c=1.039 \text{ in CHCl}_3)$	29.5-33.5 (°)	33.35 °
Purity(HPLC)	98-100 (%)	98.38200 %
Melting point	67-72 (°C)	70.32800 °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



John Su
QA & QC Manager