

ALADDIN SCIENTIFIC CORPORATION

14078 Meridian Parkway, Riverside, CA. 92518

Certificate of Analysis

Date of Testing: 2025-12-25 10:14:01

Date of Next Testing: 2027-12-25 10:14:01

Product Name: **(S)-1-Boc-3-methylpiperazine**

CAS Number: 147081-29-6

Specifications & Purity: $\geq 98\%$

Lot #: E2231019

SKU #: **I131751**

Version: **0**

Analysis #: **624346**

Storage Temperature: Argon charged

Parameter	Limit Values	Result
Specific Rotation [α] ₂₀ /D(c=2.5 in MeOH)	-27--23 (°)	-25.90 °
Purity(GC)	98-100 (%)	98.65 %
Appearance (I131751)	White to off-white to cream to yellow Low melting solid or lumpy powder or Crystals or Crystalline Chunks	White to off-white to cream to yellow Low melting solid or lumpy powder or Crystals or Crystalline Chunks
Proton NMR spectrum	Conforms to Structure	Conforms to Structure



John Su
QA & QC Manager