

ALADDIN SCIENTIFIC CORPORATION

14078 Meridian Parkway, Riverside, CA. 92518

Certificate of Analysis

Date of Testing: 2026-05-30 13:47:45

Date of Next Testing: 2029-05-29 13:47:45

Product Name: (R)-4-N-Boc-piperazine-2-carboxylic acid methyl ester

CAS Number: 438631-77-7

Specifications & Purity: ≥97%

Lot #: E2620566

SKU #: M184545

Version: 1

Analysis #: 641654

Storage Temperature: Store at 2-8°C, Protected from light, Argon charged

Parameter	Limit Values	Result
Specific Rotation [α] ₂₀ /D(c=1 in MeOH)	-45~ -40 (°)	-43.61000 °
Purity(HPLC area)	97-100 (%)	97.01000 %
NMR Spectrum 1H	Conforms to Structure	Conforms to Structure
LC-MS for identification	Conforms	Conforms



John Su
QA & QC Manager