

ALADDIN SCIENTIFIC CORPORATION

14078 Meridian Parkway, Riverside, CA. 92518

Certificate of Analysis

Date of Testing: 2023-10-27 16:09:03
 Date of Next Testing: 2026-10-26 16:09:03
 Product Name: **tert-Butyl (R)-3-(cyanomethyl)piperazine-1-carboxylate**
 CAS Number: 2306248-13-3
 Specifications & Purity: $\geq 98\%$
 Lot #: J2325412
 SKU #: **T588283**
 Version: **1**
 Analysis #: **273447**
 Storage Temperature: Store at 2-8°C, Protected from light, Desiccated

Parameter	Limit Values	Result
Purity(GC)	98-100 (%)	99.20300 %
Specific Rotation $[\alpha]_{20/D(c=1 \text{ in MeOH})}$	15.9-19.9 (°)	19.89100°
Proton NMR spectrum	Conforms to Structure	Conforms to Structure



John Su
QA & QC Manager