

ALADDIN SCIENTIFIC CORPORATION

14078 Meridian Parkway, Riverside, CA. 92518

Certificate of Analysis

Date of Testing: 2023-10-27 16:10:36

Date of Next Testing: 2026-10-26 16:10:36

Product Name: **tert-Butyl (R)-3-(cyanomethyl)piperazine-1-carboxylate**

CAS Number: 2306248-13-3

Specifications & Purity: 98%

Lot #: J2325439

SKU #: **T588283**

Analysis: **273447**

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

Parameter	Limit Values	Result
Purity(GC)	98-100 (%)	99.20 %
Specific Rotation $[\alpha]_{20/D}(c=1 \text{ in MeOH})$	15.9-19.9 (°)	19.89°
Proton NMR spectrum	Conforms to Structure	Conforms to Structure

A handwritten signature in black ink that reads "John Su".

John Su
QA & QC Manager