

ALADDIN SCIENTIFIC CORPORATION

14078 Meridian Parkway, Riverside, CA. 92518

## Certificate of Analysis

Date of Testing: 2024-04-07 13:44:33  
Date of Next Testing: 2026-04-07 13:44:33  
Product Name: (S)-RuCl[(p-cymene)(T-BINAP)]Cl  
CAS Number: 228120-95-4  
Specifications & Purity: 95%  
Lot #: F2218452  
SKU #: S138527  
Analysis: 339634  
Storage Temperature: Store at 2-8°C, Argon charged

Parameter	Limit Values	Result
Purity(HPLC)	95-100 (%)	98.70000 %
Specific rotation $[\alpha]_{20/D}(C=0.5g/100mL CHCl_3)$	-545--445 (°)	-529.00000 °
Proton NMR spectrum	Conforms to Structure	Conforms to Structure



John Su  
QA & QC Manager