

ALADDIN SCIENTIFIC CORPORATION

14078 Meridian Parkway, Riverside, CA. 92518

## Certificate of Analysis

Date of Testing: 2023-11-15 10:25:05  
Date of Next Testing: 2026-11-14 10:25:05  
Product Name: 5-(di-tert-Butylphosphino)-1',3',5'-triphenyl-1'H-1,4'-bipyrazole  
CAS Number: 894086-00-1  
Specifications & Purity: ≥98%  
Lot #: K2309565  
SKU #: D590603  
Version: 1  
Analysis #: 287240  
Storage Temperature: Store at 2-8°C, Protected from light, Argon charged

Parameter	Limit Values	Result
Purity(HPLC area)	98-100 (%)	99.19%
Appearance(D590603)	White to Light yellow to Yellow to Beige Powder or Crystals	White to Light yellow to Yellow to Beige Powder or Crystals
NMR Spectrum 1H	Conforms to structure	Conforms to Structure
Phosphorus NMR Spectra	Conforms to Structure	Conforms to Structure



John Su  
QA & QC Manager