

ALADDIN SCIENTIFIC CORPORATION

14078 Meridian Parkway, Riverside, CA. 92518

## Certificate of Analysis

|                          |   |
|--------------------------|---|
| Date of Testing:         | 2022-12-22 11:42:40   |
| Date of Next Testing:    | 2026-12-21 11:42:40   |
| Product Name:            | <b>(R)-3,3'-Bis[3,5-bis(trifluoromethyl)phenyl]-1,1'-binaphthyl-2,2'-diyl hydrogenphosphate</b> |
| CAS Number:              | 791616-62-1   |
| Specifications & Purity: | ≥98%  |
| Lot #:                   | L2213032  |
| SKU #                    | <b>B299327</b>  |
| Version                  | <b>1</b>  |
| <b>Analysis #:</b>       | <b>137897</b>   |
| Storage Temperature:     | Store at 2-8°C, Argon charged   |

| Parameter   | Limit Values   | Result   |
|---|--|--|
| Purity(HPLC)  | 98-100 (%)   | 99.01500 %   |
| Optical Rotation (c = 1%; Chloroform (Stabilized with Ethanol)) | -255~-205 (°)  | -254.76000 °   |
| Appearance(B299327)   | White to Light Yellow and Faint Beige to Beige Crystal to Powder | White to Light Yellow and Faint Beige to Beige Crystal to Powder |
| Proton NMR spectrum   | Conforms to Structure  | Conforms to Structure  |



John Su  
QA & QC Manager