

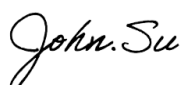
ALADDIN SCIENTIFIC CORPORATION

14078 Meridian Parkway, Riverside, CA. 92518

Certificate of Analysis

Date of Testing: 2023-03-10 20:53:31
Date of Next Testing: 2025-02-27 20:53:31
Product Name: **(R)-3,3'-Dibromo-2,2'-dimethoxy-1,1'-binaphthyl**
CAS Number: 75714-59-9
Specifications & Purity: 95%
Lot #: C2303350
SKU #: **D121036**
Analysis: **185260**

Parameter	Limit Values	Result
Purity(HPLC)	95-100 (%)	96.69700%
Specific Rotation $[\alpha]_{20/D}(c=1 \text{ in CHCL}_3)$	10-14 (°)	10.01°
Melting point	180-185 (°C)	181.00000 °C
Solubility in CHCL ₃	almost transparency	almost transparency
NMR Spectrum 1H	Conforms to Structure	Conforms to Structure

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

John Su
QA & QC Manager