

ALADDIN SCIENTIFIC CORPORATION

14078 Meridian Parkway, Riverside, CA. 92518

## Certificate of Analysis

Date of Testing: 2022-08-09 18:24:36  
 Date of Next Testing: 2025-08-08 18:24:36  
 Product Name: **Quinine**  
 CAS Number: 130-95-0  
 Specifications & Purity: for fluorescence,  $\geq 98.0\%$   
 Lot #: H2206272  
 SKU #: **Q105030**  
**Analysis:** **093392**  
 Storage Temperature: Protected from light, Argon charged

Parameter	Limit Values	Result
Purity(dried material, NT)	97.5-102.5 (%)	99.42 %
loss on drying, 110 °C	0-1 (%)	0.01 %
dihydroquinine(NMR)	0-5 (%)	0.00000 %
Specific Rotation $[\alpha]_{20/D}(c=1 \text{ in CHCL}_3)$	-131--121 (°)	-126.72 °
Melting point	173-175 (°C)	174.98000 °C
Appearance (Q105030)	white to light grey powder	white to light grey powder
Infrared spectrum	Conforms to Structure	Conforms to Structure
Fluorescence, $\lambda_{ex}$ 347 nm; $\lambda_{em}$ 448 nm in 0.5 M sulfuric acid suitability for fluorescence	Conforms pass	Conforms Pass



John Su  
QA & QC Manager