

ALADDIN SCIENTIFIC CORPORATION

14078 Meridian Parkway, Riverside, CA. 92518

## Certificate of Analysis

Date of Testing: 2024-11-18 17:32:43  
 Date of Next Testing: 2027-11-18 17:32:43  
 Product Name: **3 , 3'-Diaminobenzidine tetrahydrochloride hydrate**  
 CAS Number: 7411-49-6  
 Specifications & Purity:  $\geq 99\%$   
 Lot #: K2404240  
 SKU #: **D693820**  
 Version: **1**  
 Analysis #: **438309**  
 Storage Temperature: Store at -20°C

| Parameter                | Limit Values                                                                 | Result                                                                       |
|--------------------------|------------------------------------------------------------------------------|------------------------------------------------------------------------------|
| Purity(HPLC)             | 99-100 (%)                                                                   | 99.38100 %                                                                   |
| NMR Spectrum 1H          | Conforms to Structure                                                        | Conforms to Structure                                                        |
| LC-MS for identification | Conforms                                                                     | Conforms                                                                     |
| Appearance(D693820)      | White to Light Grey to Amber to Light Brown to Dark purple powder to crystal | White to Light Grey to Amber to Light Brown to Dark purple powder to crystal |



John Su  
QA & QC Manager