

ALADDIN SCIENTIFIC CORPORATION

14078 Meridian Parkway, Riverside, CA. 92518

## Certificate of Analysis

Date of Testing: 2025-09-01 17:31:24  
 Date of Next Testing: 2029-08-31 17:31:24  
 Product Name: **D-(+)-Mannose**  
 CAS Number: 3458-28-4  
 Specifications & Purity: Moligand™, for cell culture, ≥99%  
 Lot #: H2526447  
 SKU #: **M113093**  
 Version: **1**  
 Analysis #: **566557**  
 Storage Temperature: Room temperature, Argon charged, Desiccated, Cool

| Parameter                                                                             | Limit Values              | Result                    |
|---------------------------------------------------------------------------------------|---------------------------|---------------------------|
| Purity(HPLC)                                                                          | 99-100 (%)                | 99.91700 %                |
| Specific Rotation [α] <sub>25</sub> /D(c=4 in H <sub>2</sub> O in stand for 24 hours) | 13.5-14.9 (°)             | 14.25000 °                |
| Appearance (M113093)                                                                  | White to Off-White Powder | White to Off-White Powder |
| Cell Culture Test                                                                     | pass                      | Pass                      |
| Carbon NMR Spectrum                                                                   | Conforms to Structure     | Conforms to Structure     |
| Solubility in H <sub>2</sub> O , Colorless to Faint Yellow, Clear ,50 mg/ml           | pass                      | Pass                      |
| Proton NMR spectrum                                                                   | Conforms to Structure     | Conforms to Structure     |



John Su  
QA & QC Manager