

ALADDIN SCIENTIFIC CORPORATION

14078 Meridian Parkway, Riverside, CA. 92518

## Certificate of Analysis

Date of Testing: 2024-11-01 09:53:54

Date of Next Testing: 2026-11-01 09:53:54

Product Name: **Muramic acid**

CAS Number: 1114-41-6

Specifications & Purity:  $\geq 95\%$ 

Lot #: J2425830

SKU #: **M132986**

Version: **2**

Analysis #: **413915**

Storage Temperature: Store at  $-20^{\circ}\text{C}$ 

| Parameter                                                                     | Limit Values                            | Result                                  |
|-------------------------------------------------------------------------------|-----------------------------------------|-----------------------------------------|
| Specific Rotation $[\alpha]_{22}^{\text{D}}$ (c=1.86g/ml in H <sub>2</sub> O) | 95-117 ( $^{\circ}$ )                   | 108.40000 $^{\circ}$                    |
| Purity(TLC)                                                                   | 95-100 (%)                              | 98.40000 %                              |
| Appearance (M132986)                                                          | White to off-white to Light Brown solid | White to off-white to light brown solid |
| Proton NMR spectrum                                                           | Conforms to Structure                   | Conforms to Structure                   |
| Infrared spectrum                                                             | Conforms to Structure                   | Conforms to Structure                   |



John Su  
QA & QC Manager