

ALADDIN SCIENTIFIC CORPORATION

14078 Meridian Parkway, Riverside, CA. 92518

## Certificate of Analysis

Date of Testing: 2026-03-26 11:15:52  
 Date of Next Testing: 2030-03-25 11:15:52  
 Product Name: **N $\alpha$ -p-Tosyl-L-arginine methyl ester hydrochloride**  
 CAS Number: 1784-03-8  
 Specifications & Purity:  $\geq 98\%$   
 Lot #: C2616430  
 SKU #: **T105948**  
 Version: **1**  
 Analysis #: **662418**  
 Storage Temperature: Store at -20°C

| Parameter                                                       | Limit Values             | Result                   |
|-----------------------------------------------------------------|--------------------------|--------------------------|
| Melting point                                                   | 146-150 (°C)             | 149.83000 °C             |
| Purity(HPLC)                                                    | 98-100 (%)               | 98.79500 %               |
| Specific Rotation [a] <sub>20</sub> /D(c=4 in H <sub>2</sub> O) | -15--13 (°)              | -14.07200 °              |
| Carbon by Elemental Analysis                                    | 43.3-45.5 (%)            | 44.31800 %               |
| Nitrogen by Elemental Analysis                                  | 14.4-15.3 (%)            | 14.80200 %               |
| Appearance (T105948)                                            | White Powder or Crystals | White Powder or Crystals |
| Proton NMR spectrum                                             | Conforms to Structure    | Conforms to Structure    |



John Su  
QA & QC Manager