

ALADDIN SCIENTIFIC CORPORATION

14078 Meridian Parkway, Riverside, CA. 92518

## Certificate of Analysis

Date of Testing: 2022-08-26 11:24:20

Date of Next Testing: 2026-08-25 11:24:20

Product Name: **L(-)-Carnitine**

CAS Number: 541-15-1

Specifications &amp; Purity: 98%

Lot #: H2223246

SKU #: **C105423****Analysis:** **115874**

Storage Temperature: Argon charged

| Parameter                                                       | Limit Values            | Result                  |
|-----------------------------------------------------------------|-------------------------|-------------------------|
| Purity(NonaqueousTitration)                                     | 97.5-102.5 (%)          | 99.22 %                 |
| Heavy metal (as Pb)                                             | 0-10 (ppm)              | 6.93 ppm                |
| Loss on drying                                                  | 0-1 (%)                 | 0.06 %                  |
| Sulfate Ash                                                     | 0-0.1 (%)               | 0.06 %                  |
| Specific Rotation [α] <sub>20</sub> /D(c=1 in H <sub>2</sub> O) | -33--30 (°)             | -31.56 °                |
| Appearance (C105423)                                            | white powder to crystal | White powder to crystal |
| Infrared spectrum                                               | Conforms to Structure   | Conforms to Structure   |

A handwritten signature in black ink that reads "John Su".John Su  
QA & QC Manager