

ALADDIN SCIENTIFIC CORPORATION

14078 Meridian Parkway, Riverside, CA. 92518

Certificate of Analysis

Date of Testing: 2023-02-15 19:54:43
 Date of Next Testing: 2027-02-14 19:54:43
 Product Name: **L-Isoleucine**
 CAS Number: 73-32-5
 Specifications & Purity: from non-animal source,for cell culture,98.5-101.0%,EP,JP,USP
 Lot #: B2310331
 SKU #: **I115775**
Analysis: **007279**
 Storage Temperature: Desiccated

| Parameter | Limit Values | Result |
|---|--------------------------|--------------------------|
| Heavy metals | 0-10 (ppm) | 0.99 ppm |
| Iron(Fe) | 0-10 (ppm) | 0.51 ppm |
| Purity(NonaqueousTitration) | 98.5-101.5 (%) | 100.20 % |
| Loss on drying | 0-0.2 (%) | 0.07 % |
| Chloride | 0-0.02 (%) | 0.00 % |
| Ignition Residue | 0-0.1 (%) | 0.06 % |
| Sulfate(SO42-) | 0-0.02 (%) | 0.00 % |
| Ammonia (NH4) | 0-0.02 (%) | 0.00 % |
| (As)Arsenic | 0-1 (ppm) | 0.99 ppm |
| Specific Rotation [α] ₂₀ /D(c=4 in 6mol/L HCl) | 38-43 (°) | 38.55° |
| Appearance (I115775) | White Powder or Crystals | White Powder or Crystals |
| Cell Culture Test | pass | Pass |
| Infrared spectrum | Conforms to Structure | |
| Origin | non-animal source | non-animal source |
| Solubility in 1 M HCl , Colorless Clear 50 mg/ml | pass | Pass |



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A handwritten signature in black ink that reads "John Su". The signature is written in a cursive, flowing style.

John Su
QA & QC Manager