

Certificate of Analysis

Date of Testing: 2022-02-08 11:06:36
 Date of Next Testing: 2026-02-07 11:06:36
 Product Name: **L-Histidine**
 CAS Number: 71-00-1
 Specifications & Purity: EP,USP ,from non-animal source,for cell culture
 Lot #: A2219459
 SKU #: **H108261**
Analysis: 056534

| Parameter | Limit Values | Result |
|--|---------------------------|---------------------------|
| PH test | 7-8.5 | 8.10 |
| Ammonia (NH ₄) | 0-0.02 (%) | 0.01 % |
| Assay | 98.5-100 (%) | 99.85 % |
| Specific Rotation [α] ₂₀ /D(c=11 in 6M HCl/EP) | 12-12.8 (°) | 12.02° |
| Loss on drying | 0-0.2 (%) | 0.10 % |
| Chloride | 0-0.02 (%) | 0.00 % |
| (As)Arsenic | 0-1 (ppm) | 0.60 ppm |
| Sulfate(SO ₄ ²⁻) | 0-0.02 (%) | 0.01 % |
| Ignition Residue (as sulfate) | 0-0.1 (%) | 0.05 % |
| Heavy metal (as Pb) | 0-10 (ppm) | 5.00 ppm |
| Endonuclease Detection | 0-0.1 (EU/g) | 0.06 EU/g |
| Specific Rotation [α] ₂₅ /D(c=11 in 6M HCl/USP) | 12.6-14 (°) | 12.82° |
| Appearance (h108261) | White to Off-White Powder | White to Off-White Powder |
| Cell Culture Test | pass | Pass |
| Infrared spectrum | Conforms to Structure | Conforms to Structure |
| Ninhydrin-positive substances (other amino acids) | Conforms | Conforms |
| Origin | non-animal source | non-animal source |
| Residual solvents | complies | complies |
| Solubility in H ₂ O , Colorless solution 0.5G/10MLwater | 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