

Certificate of Analysis

Date of Testing: 2022-07-23 15:31:11
 Date of Next Testing: 2026-07-22 15:31:11
 Product Name: **L-Histidine monohydrate monohydrochloride**
 CAS Number: 5934-29-2
 Specifications & Purity: from non-animal source,EP,JP,USP ; for cell culture,98.5 to 101.0%
 Lot #: G2219583
 SKU #: **H106211**
Analysis: 100078
 Storage Temperature: Argon charged

| Parameter | Limit Values | Result |
|--|--------------------------|--------------------------|
| Endonuclease Detection | 0-0.1 (EU/g) | 0.10 EU/g |
| Heavy metal (as Pb) | 0-10 (ppm) | 8.20 ppm |
| Ignition Residue (as sulfate) | 0-0.1 (%) | 0.03 % |
| Iron(Fe) | 0-10 (ppm) | 7.00 ppm |
| Sulfate(SO42-) | 0-0.02 (%) | 0.01 % |
| (As)Arsenic | 0-1 (ppm) | 0.50 ppm |
| Chloride | 16.66-17.08 (%) | 16.80 % |
| Ammonia (NH4) | 0-0.02 (%) | 0.01 % |
| Assay | 98.5-101 (%) | 99.20 % |
| Specific Rotation [α] ₂₀ /D(c=5 in 5 M HCl) | 9-10 (°) | 9.20° |
| Appearance (H106211) | white crystalline powder | white crystalline 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 |



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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