

# Certificate of Analysis (COA)

Product Name: GHK-Cu(Copper Tripeptide-1)

Lot No.: 3132157

Sequence: Gly-His-Lys (Cu<sup>2+</sup> chelated)

Modifications: C-terminal

Storage Conditions: Store in a cool place (8–15°C) at room temperature,Protect from light Keep dry, desiccated environment

Report Date: 20 July 2026

## Test Results

| Test Item                           | Specification                                          | Result    |
|-------------------------------------|--------------------------------------------------------|-----------|
| Appearance                          | Blue to blue-violet lyophilized powder                 | Conforms  |
| Molecular Weight (MS)               | 340.8 Da ±1.0 Da                                       | 340.9 Da  |
| Purity (HPLC)                       | >98%                                                   | 99.4%     |
| Retention Time (HPLC)               | ±0.2 min of standard                                   | Conforms  |
| Assay                               | 95.0–105.0%                                            | 99.1%     |
| Related Substances (HPLC)           | Individual impurity ≤0.50%;<br>Total impurities ≤2.00% | Conforms  |
| Copper Content                      | 7.5–9.5%                                               | 8.2%      |
| Free Copper Ion (Cu <sup>2+</sup> ) | ≤ 0.5%                                                 | 0.12%     |
| Solubility                          | Freely soluble in water                                | Conforms  |
| Acetic Acid Content                 | ≤ 5000 ppm                                             | 780 ppm   |
| TFA Content                         | ≤ 50 ppm                                               | 8 ppm     |
| DCM Content                         | ≤ 50 ppm                                               | N.D.      |
| DMF Content                         | ≤ 100 ppm                                              | N.D.      |
| Total Aerobic Count                 | ≤100 CFU/g                                             | <10 CFU/g |

|                     |            |            |
|---------------------|------------|------------|
| Yeast & Molds Count | ≤10 CFU/g  | <10 CFU/g  |
| Endotoxins          | ≤0.5 EU/mg | <0.05EU/mg |
| E. Coli             | Absent     | N.D.       |
| Salmonella          | Absent     | N.D.       |
| Heavy Metals        | ≤10 ppm    | <1 ppm     |