

Certificate of Analysis

Product	GHK-Cu	CAS No.	49557-75-7
Product No.	GHK	Molecular Formula	C ₁₄ H ₂₄ CuN ₆ O ₄
Sequence	Glycyl-L-Histidyl-L-Lysine Copper(II)	—	—
Batch No.	GHK-26031501	Quantity	1275.0g
Mfg. Date	Mar. 13th, 2026	Retest Date	Mar. 12th, 2028

【ITEMS】	【SPECIFICATIONS】	【RESULTS】
Appearance	White or almost white loose powder	White loose powder
Solubility	Soluble in water	Conforms
Solution clarity and color	Clear and colorless liquid (C=30mg/ml)	Conforms
Identification-H PLC	The retention time of the principal peak of the test solution corresponds to that of the reference solution, as obtained in the Assay	Conforms
Identification-Mass spectrum	440.0±1.0	440.1

Amino Acid	SPECIFICATIONS	RESULTS
Gly	0.9~1.1	1
His	0.9~1.1	1
Lys	0.9~1.1	1
Copper ion	0.9~1.1	1

ITEMS	SPECIFICATIONS	RESULTS
Related substances (HPLC) Largest peak Detected Total Peaks Detected	Largest peak Detected: NMT 0.5% Total Peaks Detected: NMT 2.0%	0.16% 0.76%
Purity (HPLC)	NLT 98.0%	99.30%
pH	6.5~8.5	7.2
Acid group ions Trifluoroacetate ion Acetate ion	Trifluoroacetate ion NMT 0.5% Acetate ion NMT 0.5%	N.D N.D



Water content (KF)	NMT 8.0%	3.70%
Peptide content	NLT 90.0%	94.00%
Oligomer	NMT 0.5%	N. D
Residual solvent Methylene chloride Acetonitrile Methyl tert-butyl ether DMF	Methylene chloride NMT 600ppm Acetonitrile NMT 410ppm Methyl tert-butyl ether NMT 5000 ppm DMF NMT 880ppm	N. D 65ppm N. D N. D
Bacterial endotoxins	NMT 5EU/mg	<3EU/mg
Microbial Limits Total aerobic bacteria Mould & Yeast Bile tolerant enterobacteria Pseudomonas aeruginosa Staphylococcus aureus	Total aerobic bacteria ≤ 100 cfu/g Mould & Yeast ≤ 10 cfu/g Bile tolerant enterobacteria: absence in 1g Pseudomonas aeruginosa: absence in 1g Staphylococcus aureus: absence in 1g	Conforms Conforms absent absent absent
Assay	95.0%~105.0% (Calculated on anhydrous, ion-free basis)	99.10%
Storage	Keep in tight container, protect from light, store at a temperature of $-20\pm 5^{\circ}\text{C}$	—
Report	Li peng	Date: 2026. 3. 13
Reviewer	PengHailun	Date: 2026. 3. 13



Conclusion: This batch of product complies with Enterprise Standard.
It is only supplied as chemical product. It is only for R&D use.