CRAFA
PEPTIDE & COMPOUND ANALYSIS

Independent Peptide & Research-Compound Testing
14 Mill Lane, Cambridge, United Kingdom

CERTIFICATE OF ANALYSIS

Certificate of Analysis (COA)

No. CRF-2026-2082
Issued: 2026-10-16

PRODUCT IDENTIFICATION

PRODUCT	AHK-Cu 100 mg
SKU / INTERNAL CODE	CRF-2026-2082
PRESENTATION	Lyophilised powder, 100 mg vial
BATCH NUMBER	LOT-2610-2082

CLIENT	SAMPLE RECEIVED	ANALYSIS DATE
veltispeptides.mx	2026-10-11	2026-10-14

PRODUCTION DATE	ISSUED	EXPIRY / RETEST
2026-10-09	2026-10-16	2028-10-16

MOLECULAR FORMULA
C15H24N6O4.Cu

MOLECULAR WEIGHT	CAS NUMBER
415.94	N/A

ANALYTICAL METHOD

PANEL
SILVER - HPLC-UV + LC-MS/MS + ICP-MS (Pb/As/Cd/Hg) + LAL endotoxin

METHOD
RP-HPLC-UV 214 nm · LC-MS/MS ESI Q-TOF · ICP-MS · LAL kinetic chromogenic (USP <85>)

INSTRUMENT
Agilent 1290 · Agilent 7900 ICP-MS · Charles River Endosafe nexgen-PTS

Column: C18 4.6×150mm | Temperature: 35°C | Mobile phase: 0.1% TFA H2O / ACN | Flow: 1.0 mL/min | Retention time: 5.7 min

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1. PURITY & ASSAY - RP-HPLC-UV (214 nm)

Test	Specification	Result	Status
HPLC Purity	≥98.0%	99.5%	PASS
Quantity	95.0-105.0%	99.9 mg (99.9%)	PASS
Copper Content (ICP-MS)	14.5-16.0%	15.3%	PASS

2. LC-MS/MS STRUCTURAL CONFIRMATION

Test	Reported data	Status
Free peptide - Theoretical [M+H]+	354.2 | Observed: 354.3 | Δ +0.10 Da	PASS
Cu complex - Theoretical [M+Cu-H]+	416.1 | Observed: 416.2 | Δ +0.10 Da	PASS
Sequence Coverage (MS/MS)	≥95% | 100% (Ala-His-Lys)	PASS
Key fragments	b2 183.1 · b3 311.2 · y1 147.1 · y2 275.2	PASS
Modifications	Ala1 vs Gly1 in GHK confirmed by -14.02 Da b1 shift; Cu(II) coordination via His imidazole confirmed	PASS

RESEARCH USE ONLY - NOT FOR HUMAN OR VETERINARY USE

3. HEAVY METALS - ICP-MS (USP <232>/<233>)

Test	Specification	Result	Status
Pb	≤5.0 µg/g	<0.05 µg/g	PASS
As	≤15.0 µg/g	<0.10 µg/g	PASS
Cd	≤2.0 µg/g	<0.02 µg/g	PASS
Hg	≤3.0 µg/g	<0.01 µg/g	PASS

4. ENDOTOXIN - LAL kinetic chromogenic (USP <85>)

Test	Reported data	Status
Result	<1.0 EU/mg limit | 0.23 EU/mg | PPC recovery 86%	PASS

FINAL BATCH RESULT

PASS - Conforms to specifications

ANALYST NOTES

Ala-His-Lys copper(II) complex. Blue-violet solution at 1 mg/mL. Distinguished from GHK-Cu by MS/MS b1 mass shift and retention time (-0.4 min).

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