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ANALYSED BY AN INDEPENDENT UK LABORATORY PARTNER USING ESTABLISHED HPLC & LC-MS METHODS.

CERTIFICATE ID	PREPARED FOR	SAMPLE	EXPECTED MW
PV-143F3D-CFOP-77	BioSupplyUK	AHK-Cu	354.40 Da
SERVICE TIER	**BATCH / LOT**	**ANALYSIS DATE**	**INSTRUMENT**
Combined · HPLC + LC-MS	BSUK004	13/11/2026	Shimadzu LCMS-8040 · PDA
METHOD	**DETECTION**	**MS IONIZATION**	**ACQUISITION**
HPLC + ESI-MS	UV 215 nm (±4)	ESI+	Single injection · UV and MS in line
COLUMN	**MOBILE PHASE**	**FLOW RATE**	
Discovery HS-F5-3, 2.1 x 150 mm	0.1% Formic Acid in Water / 0.1% Formic Acid in Acetonitrile	0.3 ml/min	

00 ASSESSMENT

SAMPLE AS RECEIVED

PURITY — HPLC	**99.86%**	Chromatographic Purity (Area %) of the integrated UV signal. Single integrated peak. *What this means: 99.86% is the reported purity figure for this sample.*
IDENTITY — LC-MS	● **Confirmed**	Cu chelate confirmed. Under ESI the complex dissociates, so the free-peptide base peak (≈ 354.2 Da) is observed and matches AHK-Cu; the complex reference mass (354.40 Da) is not expected to survive ionisation. *What this means: the free-peptide form of the declared compound was detected by LC-MS — expected for a metal chelate.*

⊕ SAMPLE DESCRIPTION & LAB NOTES

RECORDED ON RECEIPT

FORM	COLOUR	CONDITION	OBSERVED RT	MS / IDENTITY MATCH
Lyophilized powder	Other	As Expected	1.59 min	As Expected

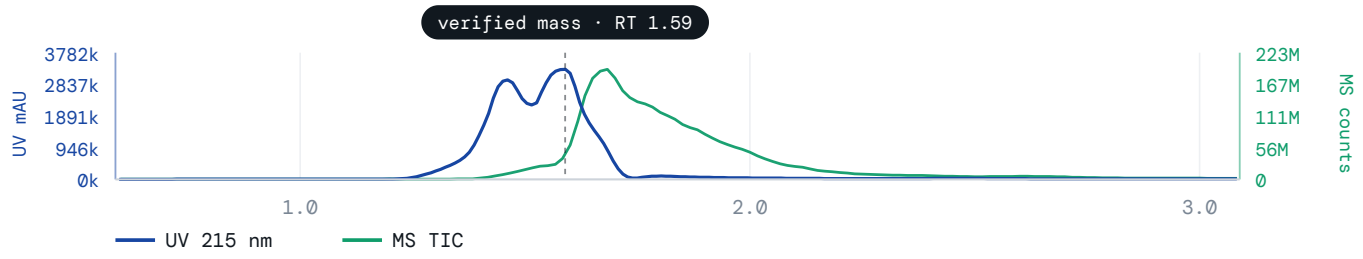
SAMPLE OBSERVATION Sample identified as AHK-Cu in paperwork received

LAB NOTES Sample tested as AHK-Cu

01 HPLC + LC-MS — CO-ELUTION

PDA 215 NM · ESI TIC

UV PURITY PEAK (BLUE, LEFT AXIS) AND LC-MS TOTAL-ION RESPONSE (GREEN, RIGHT AXIS) ON ONE RETENTION-TIME AXIS — THE VERIFIED MASS CO-ELUTES WITH THE UV PEAK · WINDOW 0.6-3.1 MIN.



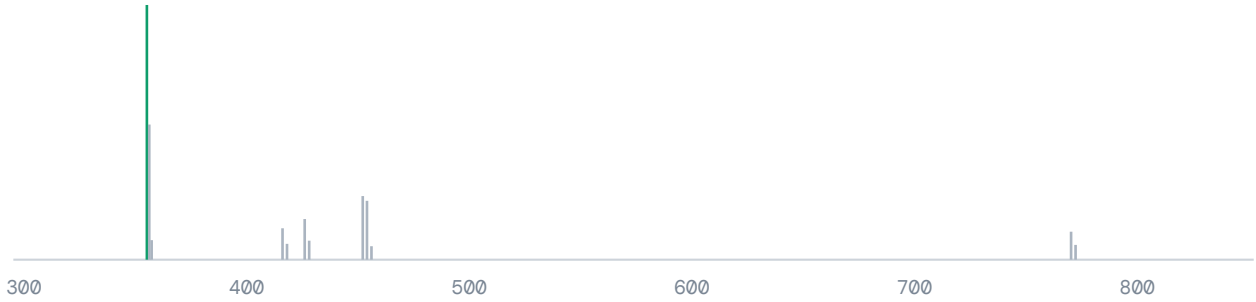
PEAK	RT / MIN	AREA	AREA %	PPI %	TAILING	PLATES N	UV MAX / NM
1	1.589	45,502,489	100.00	99.1	0.71	345	215

PPI % = Peak Purity Index — the reported purity (spectral homogeneity). **Area %** = this peak's share of total UV area, not a purity claim. Tailing = peak symmetry; Plates N = column efficiency; UV max = wavelengths at which the peak absorbs most strongly.

02 LC-MS — IDENTITY

ESI · INTACT-MASS DECONVOLUTION

ESI-MS SPECTRUM — DETECTED IONS · CHARGE-MATCHED HIGHLIGHTED



Identity: Confirmed (Cu chelate). The free-peptide base peak (≈ 354.2 Da) confirms AHK-Cu. Under electrospray ionisation the Cu complex dissociates, so the intact complex mass (354.40 Da) is not observed — this is the expected behaviour for a metal chelate, not a mismatch.

03 SYSTEM SUITABILITY

PARAMETER	RESULT	LIMIT	OUTCOME
Tailing factor (T) — main peak	0.71	≤ 3.5	PASS
Theoretical plates (N)	345	—	EARLY-ELUTING
Detector / wavelength	PDA	215 nm	PASS

04 VERIFICATION

TAMPER-EVIDENT RECORD

● INDEPENDENTLY VERIFIABLE

peptideverify.co.uk/verify/PV-143F3D-CFOP-77

INTEGRITY SHA-256 · d322a54a…6938d68b
SOURCE DATA · 20261113 batch 3_PV-143F3D_CFOP-77_010.lcd
Scan or visit the URL to confirm this certificate against PeptideVerify's source record.

AUTHORISED BY

C Bray

CHRISTOPHER BRAY · PEPTIDEVERIFY · 18/11/2026

TERMS This certificate reports analysis of the sample as received. It is not a guarantee of other units or batches, and is not an endorsement of any product, seller or vendor. For research use only, not for human consumption, and not a safety assessment or medical advice. Confirm authenticity at peptideverify.co.uk/verify.