

CERTIFICATE OF ANALYSIS

Semax

ACTH(4-7) Analogue · 10mg Lyophilised

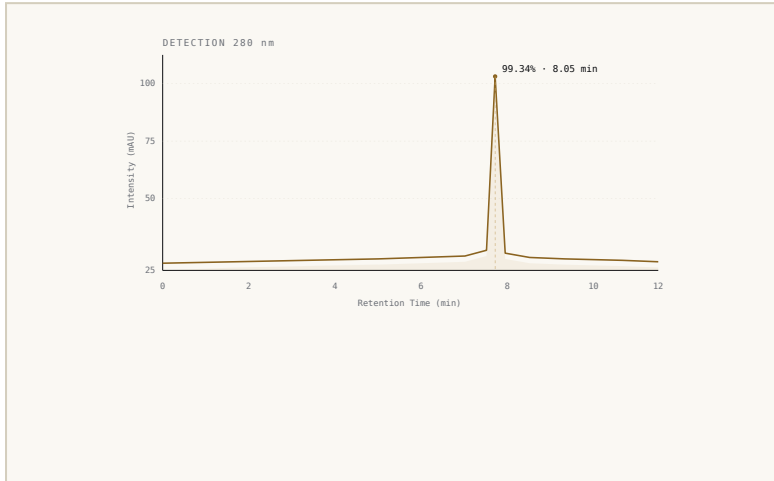
01 PRODUCT INFORMATION

PRODUCT	Semax	CAS NUMBER	80714-61-0
CHEMICAL NAME	Methionyl-Glutamyl-Histidyl-Phenylalanyl-Prolyl-Glycyl-Proline	MOL. FORMULA	C ₃₇ H ₅₁ N ₉ O ₁₀ S
QUANTITY	10mg per vial	MOL. WEIGHT	813.92 g/mol
BATCH / LOT	SEM250421	APPEARANCE	White lyophilised powder
MFG. DATE	21 April 2026	RETEST DATE	21 April 2028
STORAGE	2–8°C, dark, dry	INTENDED USE	Research Use Only

02 ANALYTICAL RESULTS

TEST ITEM	SPECIFICATION	RESULT	METHOD
Appearance	White to off-white lyophilised powder	✓ COMPLIES	Visual
Identification	Positive	✓ COMPLIES	HPLC / MS
Peptide Sequence	Correct sequence confirmed	✓ COMPLIES	Mass Spec.
Purity	≥ 99.0%	99.34%	HPLC
Peptide Content	95.0% – 105.0%	100.9%	HPLC
Acetate Content	≤ 12.0%	6.5%	Ion Chrom.
Water Content	≤ 8.0%	3.1%	Karl Fischer
Bacterial Endotoxins	≤ 10 EU/mg	< 2 EU/mg	LAL Test
Residual Solvents	Meets USP / EP requirements	✓ COMPLIES	GC
Heavy Metals	≤ 10 ppm	< 1 ppm	ICP-MS
Sterility	Sterile	✓ COMPLIES	USP <71>
pH (Reconstituted)	4.0 – 7.0	5.7	pH Meter

03 HPLC CHROMATOGRAM SUMMARY



MAIN PEAK RT	8.05 min
PEAK AREA	99.34%
TOTAL IMPURITIES	0.66%
DETECTION	UV 280 nm
COLUMN	C18 reversed-phase

04 MASS SPECTROMETRY SUMMARY

EXPECTED MOLECULAR MASS	813.92 Da
OBSERVED MOLECULAR MASS	813.97 Da
MASS DEVIATION	+ 0.05 Da (within tolerance)
RESULT	✓ IDENTITY CONFIRMED

05 QUALITY ASSURANCE & AUTHORISATION

“This batch has been manufactured and tested in accordance with internal quality control procedures and complies with all specifications listed in this Certificate of Analysis.”

RELEASED

QC APPROVED

APPROVED BY

Michael Carter

QUALITY ASSURANCE MANAGER

SIGNATURE

M. Carter

AUTHORISED DIGITALLY

DATE OF ISSUE

21 April 2026

ISSUED DIGITALLY

06 LABORATORY INFORMATION

ANALYTICAL TESTING BY

Hongbai Technology Co.

Independent third-party laboratory · HPLC · MS · ICP-MS · LAL

ISO/IEC

17025

ACCREDITED

ISSUED BY

Nexapep Ltd

DOCUMENT TYPE

Independent Third-Party CoA

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TEST REPORT NO.

HB-SEM250421

WEBSITE

nexapep.co.uk

SAMPLE REFERENCE

SEM250421



DOCUMENT VERIFICATION REFERENCE

NX-SEM250421-C7DE-CA6B

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