INDIGO

CERTIFICATE OF ANALYSIS

Certificate	IP-COA-SX-261005
Issued	7 October 2026
Status	RELEASED

Semax

Synthetic heptapeptide analogue of ACTH 4-7

BATCH

IP-SX-261001 This is the code printed on your vial.

APPLICABLE STRENGTHS

10 mg

99.60%

RP-HPLC

Specification ≥ 99.0%

IDENTITY	ENDOTOXIN
Confirmed	**< 0.1 EU/mg**
Mass spectrometry	Kinetic chromogenic LAL
STERILITY	**ANALYSED**
No growth	**4 October 2026**
Membrane filtration	Batch made 1 October 2026

Full analytical results

TESTS AND SPECIFICATIONS

Appearance

Visual inspection

SPECIFICATION	White to off-white lyophilised powder
RESULT	Conforms
STATUS	PASS

Purity

RP-HPLC (C18, 214 nm, water/acetonitrile with 0.1% TFA)

SPECIFICATION	≥ 99.0%
RESULT	99.60%
STATUS	PASS

Identity

ESI-MS

SPECIFICATION	[M+H]+ = 814.94 ± 0.50
RESULT	814.91
STATUS	PASS

Related substances

RP-HPLC, any single impurity

SPECIFICATION	≤ 1.0%
RESULT	0.18%
STATUS	PASS

Total peptide content

UV absorbance at 280 nm against reference standard

SPECIFICATION	≥ 80.0%
RESULT	93.1%
STATUS	PASS

Water content

Karl Fischer titration

SPECIFICATION	≤ 8.0%
RESULT	3.34%
STATUS	PASS

Acetate content

Ion chromatography

SPECIFICATION	≤ 15.0%
RESULT	7.0%
STATUS	PASS

pH, 1% aqueous solution

Potentiometry at 25 °C

SPECIFICATION	4.0 to 7.5
RESULT	5.8
STATUS	PASS

Bacterial endotoxins

Kinetic chromogenic LAL

SPECIFICATION	< 1.0 EU/mg
RESULT	< 0.1 EU/mg
STATUS	PASS

Sterility

Membrane filtration (USP <71>)

SPECIFICATION	No growth
RESULT	No growth
STATUS	PASS

Residual solvents

Headspace GC-FID (USP <467>)

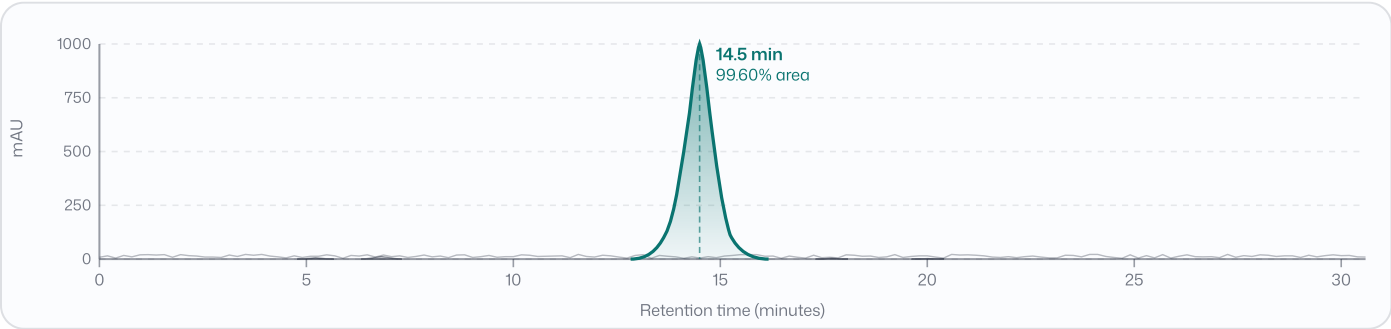
SPECIFICATION	Acetonitrile ≤ 410 ppm, methanol ≤ 3000 ppm, dichloromethane ≤ 600 ppm (ICH Q3C)
RESULT	Conforms
STATUS	PASS

Elemental impurities

ICP-MS (USP <232> and <233>)

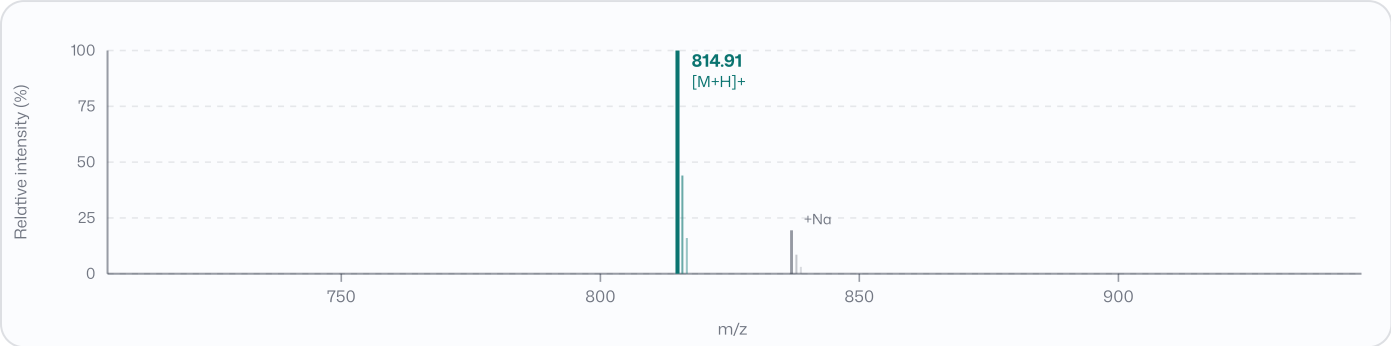
SPECIFICATION	Pb ≤ 5, Cd ≤ 2, As ≤ 15, Hg ≤ 3 µg/day (ICH Q3D, parenteral)
RESULT	Conforms
STATUS	PASS

CHROMATOGRAM



Reversed-phase trace for this batch. One dominant peak at 14.5 minutes, 99.60% of the total peak area, largest single impurity 0.18%.

MASS SPECTRUM



Electrospray ionisation. Expected 814.94, observed 814.91, a difference of -0.03 m/z at charge state 1. The smaller peak to its right is the sodium adduct, [M+Na]+, which electrospray produces alongside the protonated ion.

REFERENCE DATA

CAS NUMBER

80714-61-0

MOLECULAR FORMULA

$C_{37}H_{51}N_9O_{10}S$

MOLECULAR WEIGHT

813.93 g/mol

SEQUENCE

MEHFPGP

MODIFICATIONS

Free at both ends, alpha linkage at the glutamate. The ACTH 4-7 fragment extended at the C-terminus by Pro-Gly-Pro.

Public reference values for the compound, not measurements on this batch. The batch measurements are in the table above.

STORAGE AND HANDLING

UNOPENED

2 to 8 °C, away from light

LONG TERM

−20 °C, lyophilised, for the stated shelf life

RECONSTITUTED

2 to 8 °C, use within 4 weeks; avoid repeated freeze and thaw

IN TRANSIT

Stable at ambient temperature for up to 30 days

RECONSTITUTE WITH

Bacteriostatic water

THE VIAL THIS COVERS

The label on your vial carries the same batch code as this certificate, **IP-SX-261001**, and the QR goes to the results for it. If the code on the vial is not this one, the certificate for it is on this page under earlier batches.

Sticker shown at its printed size, 40 by 20 mm. Cap colour may vary by batch.

RELEASE

BATCH DATE 1 October 2026	ANALYSIS DATE 4 October 2026
ISSUE DATE 7 October 2026	BEST BEFORE October 2028
RELEASED BY Quality review, Indigo Peptides	DOCUMENT Valid only in its original, unmodified form

Results are taken from the batch testing documentation for this exact batch, supplied with the finished vials and held on file by us. Every value above is for the batch named on this certificate and for no other.

HOLDING AN OLDER VIAL?

IP-SX-260910

PURITY	99.55%
ANALYSED	13 September 2026

If the code on your vial is one of these, it is an earlier batch of ours and these are its results. A result we have published is never removed and never recalculated.