



CERTIFICATE OF ANALYSIS

Issued by an ISO/IEC 17025-accredited laboratory · raw data appended (page 2)

PASS

QC released for dispatch



Scan to verify

Ipamorelin — 10mg

Ipamorelin Acetate

1. PRODUCT IDENTIFICATION

Synonym	Ipamorelin Acetate	Label claim	10mg
Sequence / structure	Aib-His-D-2-Nal-D-Phe-Lys-NH ₂	Lot / Batch	ZX260512-558 / B48695
Mol. formula	C ₃₈ H ₄₉ N ₉ O ₅	Manufacture date	26 May 2026
Mol. weight	711.85 g/mol	Date of analysis	8 Jun 2026
CAS number	170851-70-4	Storage	-20 °C, dark, desiccated
Salt form	Acetate salt		

2. ANALYTICAL TEST RESULTS

Test	Method	Specification	Result	Verdict
Appearance	Visual	White/off-white powder	White to off-white lyophilized powder	PASS
Identity (ESI-MS)	LC-MS	Matches 711.85 Da	711.85 Da (Δ 0 ppm)	PASS
Purity	RP-HPLC, UV 220 nm	\geq 98.0% area	99.50%	PASS
Related substances	RP-HPLC	Single \leq 1.0 / Total \leq 2.0%	0.30 / 0.50%	PASS
Water content	Karl Fischer (USP <921>)	\leq 8.0%	1.0%	PASS
Counter-ion: acetate	Ion chromatography	Report (3.0–15.0%)	10.5%	PASS
Net peptide content	Amino-acid analysis	\geq 80.0%	86.7%	PASS
Bacterial endotoxin	LAL kinetic (USP <85>)	< 5.0 EU/mg	0.08 EU/mg	PASS
Heavy metals	ICP-MS (ICH Q3D)	Conforms	Conforms	PASS

CONCLUSION

All tested parameters CONFORM to the acceptance specifications. The batch is of high chromatographic purity (\geq 98%) with an impurity profile, identity and residual/contaminant results meeting pharmaceutical-grade quality requirements. Material released. Supporting RP-HPLC chromatogram and ESI-MS spectrum are appended on page 2.

DSY.

Dr. Sun Yan

Analyst · 8 Jun 2026 · Zhongxi Research Institute

DGT.

Dr. Guo Tao (QC Manager)

Approved by · 8 Jun 2026 · Zhongxi Research Institute

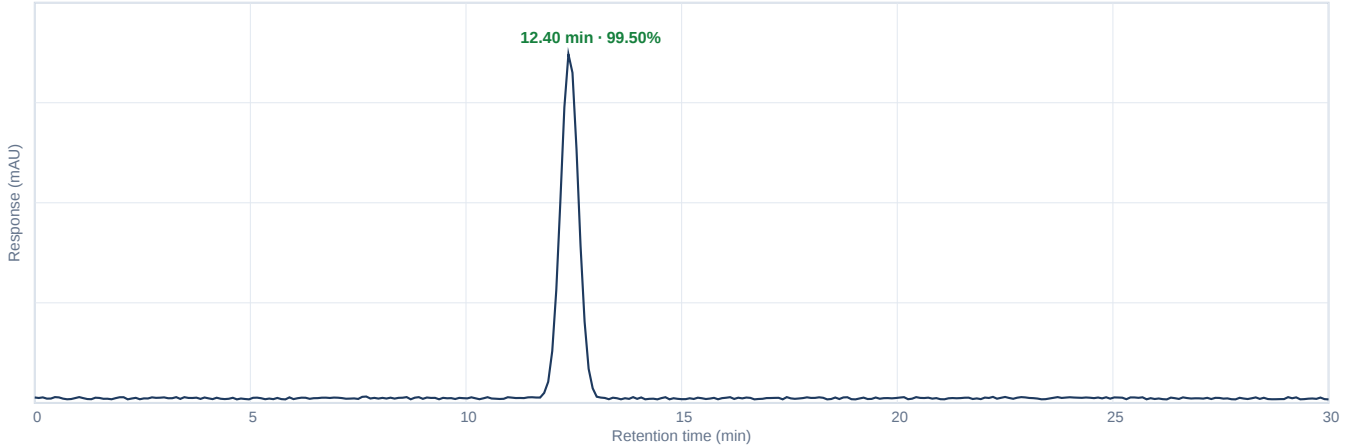


APPENDIX — ANALYTICAL RAW DATA

Ipamorelin 10mg · Lot ZX260512-558 · Cert. ZXR-COA-2026-80143

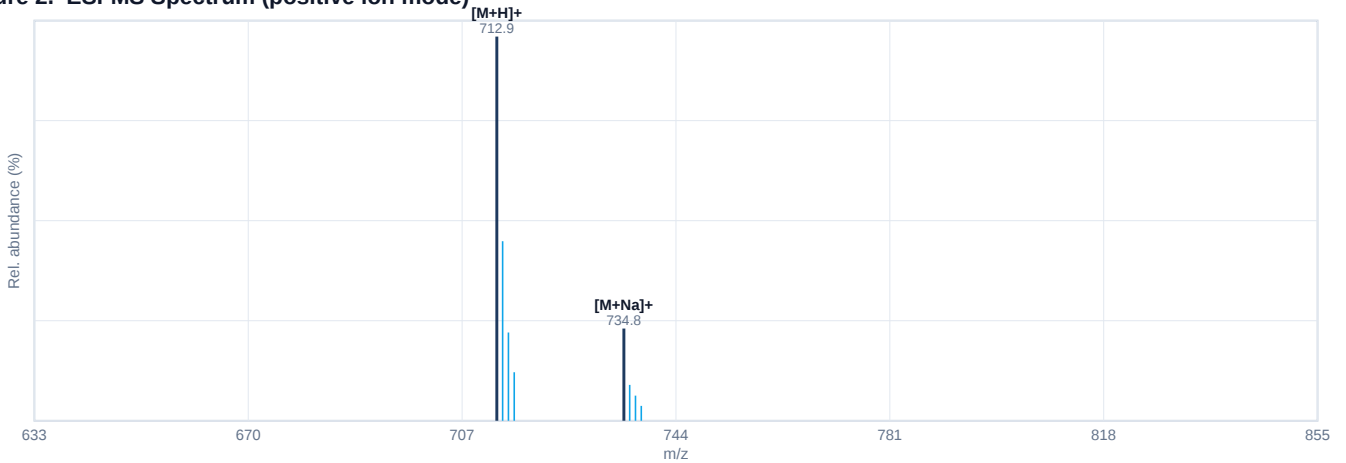


Figure 1. RP-HPLC Chromatogram (UV 220 nm)



Peak #	RT (min)	Area ($\mu\text{V}\cdot\text{s}$)	Area %	Assignment
1	12.40	899648	99.50	Main (target)
2	22.40	2547	0.27	Impurity / related substance
3	7.77	1733	0.19	Impurity / related substance
4	21.58	397	0.04	Impurity / related substance

Figure 2. ESI-MS Spectrum (positive ion mode)



Interpretation

Identity confirmed by ESI-MS. Observed ions $[M+H]^+$ 712.9, $[M+Na]^+$ 734.8 deconvolute to a neutral monoisotopic-average mass of 711.85 Da (theoretical 711.85 Da; mass error 0 ppm), consistent with Ipamorelin. No co-eluting species above 0.5% indicative of misidentification.

Methods — RP-HPLC: Agilent 1260 Infinity II; Zorbax SB-C18 4.6×250 mm, 5 μm ; A: 0.1% TFA in water, B: 0.1% TFA in MeCN; 10–70% B over 30 min; 1.0 mL/min; 25 °C; 20 μL injection. MS: AB Sciex TripleTOF, ESI+, capillary 4.5 kV, deconvolution by Bio Tool Kit. KF: Metrohm 901. IC: Thermo Dionex ICS-6000. ICP-MS: Agilent 7900.