



## CERTIFICATE OF ANALYSIS

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

PASS

QC released for dispatch



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PT-141 — 10mg

Bremelanotide

## 1. PRODUCT IDENTIFICATION

|                      |                                            |                  |                          |
|----------------------|--------------------------------------------|------------------|--------------------------|
| Synonym              | Bremelanotide                              | Label claim      | 10mg                     |
| Sequence / structure | Ac-Nle-cyclo[Asp-His-D-Phe-Arg-Trp-Lys]-OH | Lot / Batch      | ZX260512-707 / B84393    |
| Mol. formula         | C50H68N14O10                               | Manufacture date | 15 May 2026              |
| Mol. weight          | 1025.18 g/mol                              | Date of analysis | 23 May 2026              |
| CAS number           | 189691-06-3                                | 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 1025.18 Da                     | 1025.18 Da ( $\Delta$ 0 ppm)          | PASS    |
| Purity               | RP-HPLC, UV 220 nm       | $\geq 98.0\%$ area                     | 98.32%                                | PASS    |
| Related substances   | RP-HPLC                  | Single $\leq 1.0$ / Total $\leq 2.0\%$ | 0.90 / 1.68%                          | PASS    |
| Water content        | Karl Fischer (USP <921>) | $\leq 8.0\%$                           | 3.5%                                  | PASS    |
| Counter-ion: acetate | Ion chromatography       | Report (3.0–15.0%)                     | 9.0%                                  | PASS    |
| Net peptide content  | Amino-acid analysis      | $\geq 80.0\%$                          | 85.7%                                 | PASS    |
| Bacterial endotoxin  | LAL kinetic (USP <85>)   | $< 5.0$ EU/mg                          | 0.10 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 · 23 May 2026 · Zhongxi Research Institute

DFH.

Dr. Fang Hong (QC Manager)

Approved by · 23 May 2026 · Zhongxi Research Institute



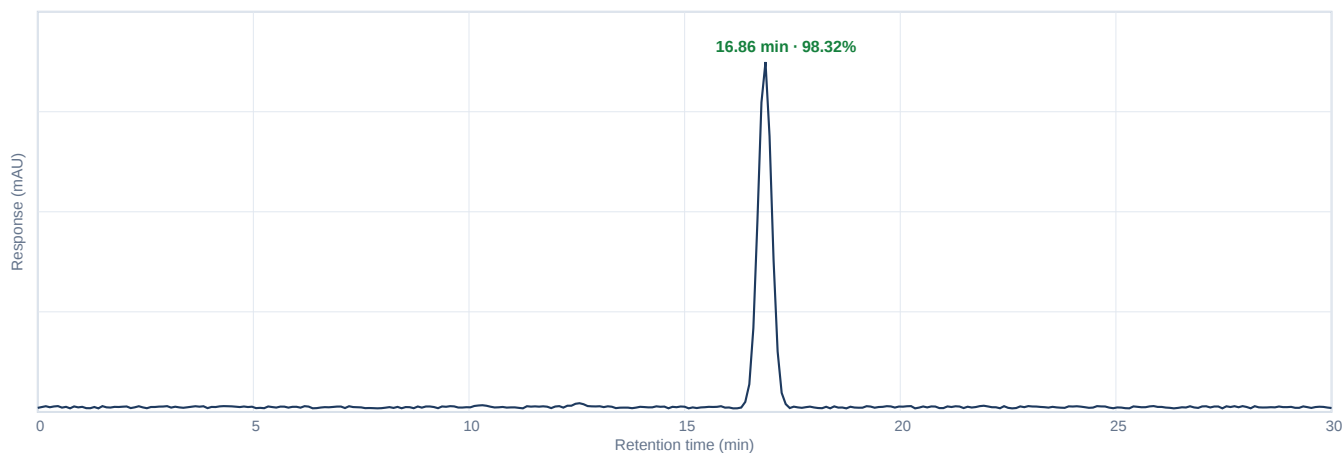
## APPENDIX — ANALYTICAL RAW DATA

PT-141 10mg · Lot ZX260512-707 · Cert. ZXR-COA-2026-94003



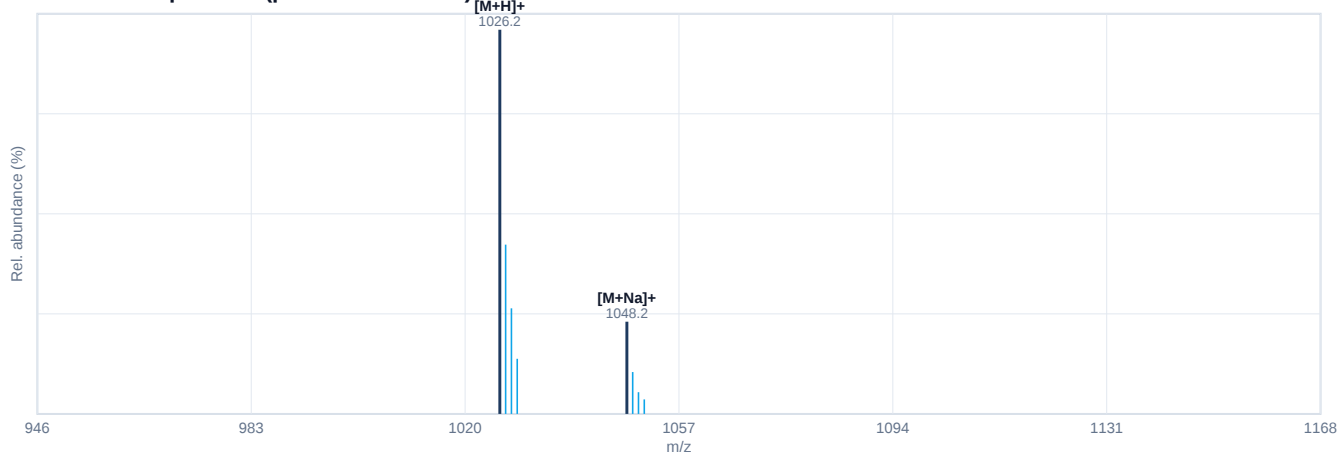
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Figure 1. RP-HPLC Chromatogram (UV 220 nm)



| Peak # | RT (min) | Area (μV·s) | Area % | Assignment                   |
|--------|----------|-------------|--------|------------------------------|
| 1      | 16.86    | 930946      | 98.32  | Main (target)                |
| 2      | 12.50    | 9381        | 0.90   | Impurity / related substance |
| 3      | 10.31    | 4334        | 0.45   | Impurity / related substance |
| 4      | 21.99    | 2134        | 0.23   | Impurity / related substance |
| 5      | 25.60    | 922         | 0.10   | Impurity / related substance |

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



## Interpretation

Identity confirmed by ESI-MS. Observed ions [M+H]<sup>+</sup> 1026.2, [M+Na]<sup>+</sup> 1048.2 deconvolute to a neutral monoisotopic-average mass of 1025.18 Da (theoretical 1025.18 Da; mass error 0 ppm), consistent with PT-141. 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.