

## CERTIFICATE OF ANALYSIS

Sermorelin Batch OP-SE515 March 2026

|                     |                                                    |                   |                                                        |
|---------------------|----------------------------------------------------|-------------------|--------------------------------------------------------|
| Product name        | Sermorelin                                         | Molecular formula | $C_{149}H_{246}N_{44}O_{42}S$                          |
| Batch number        | OP-SE515                                           | Molecular weight  | 3357.96 g/mol                                          |
| CAS number          | 86168-78-7                                         | Quantity          | 2 mg                                                   |
| Date of manufacture | March 2026                                         | PubChem CID       | 16129620                                               |
| Storage             | Powder: -20°C 3 years; 4°C 2 years; 15°C 3 months. |                   | In solvent: -80°C 6 months; -20°C 1 month; 10°C 1 week |

## Amino acid sequence

YADAIFTNSYRKVLGQLSARKLLQDIMSR-NH<sub>2</sub> (GHRH 1-29)  
 29 residues

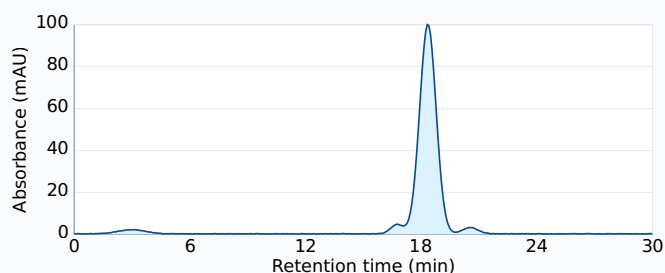
## Analytical results

| Test parameter                  | Method                    | Specification             | Result         | Status |
|---------------------------------|---------------------------|---------------------------|----------------|--------|
| Appearance                      | Visual                    | White to off-white powder | Conforms       | ✓      |
| Peptide purity                  | RP-HPLC (C18)             | ≥ 98.5%                   | 98.92%         | ✓      |
| Molecular weight confirmation   | ESI-MS                    | 3357.96 ± 1.0 Da          | Conforms       | ✓      |
| Water content                   | Karl Fischer              | ≤ 10.0%                   | 3.9%           | ✓      |
| Counter-ion content             | HPLC                      | Acetate salt (report)     | 9.5% (acetate) | ✓      |
| Total related substances        | RP-HPLC                   | ≤ 2.0%                    | 1.08%          | ✓      |
| Largest single impurity         | RP-HPLC                   | ≤ 1.0%                    | 0.65%          | ✓      |
| Residual solvent — Acetonitrile | GC-HS                     | ≤ 410 ppm                 | < 410 ppm      | ✓      |
| Residual solvent — DCM          | GC-HS                     | ≤ 600 ppm                 | < 600 ppm      | ✓      |
| Residual solvent — DMF          | GC-HS                     | ≤ 880 ppm                 | < 880 ppm      | ✓      |
| Bacterial endotoxins            | LAL kinetic turbidimetric | < 5 EU/mg                 | < 0.5 EU/mg    | ✓      |
| Bioburden                       | USP <61>                  | < 100 CFU/g (USP <61>)    | < 10 CFU/g     | ✓      |

## HPLC chromatogram

RP-HPLC C18

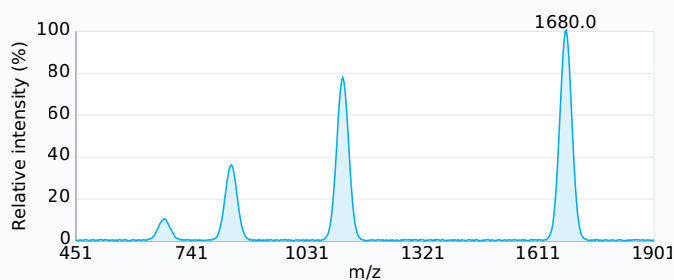
UV detection at 220 nm — gradient 10–70% ACN in 0.1% TFA over 30 min — flow 1.0 mL/min



## Mass spectrum

ESI-MS positive

Electrospray ionisation — positive mode



✓ Overall result: Conforms to specification

Results relate only to the batch tested, by the stated methods at time of release, and are provided in good faith without warranty — OP Labs does not guarantee the accuracy or completeness of the results. Storage figures are recommendations, not stability data. Research use only.