

CERTIFICATE OF ANALYSIS

ARA-290 Batch █████ November 2025

| | | | |
|---------------------|--|-------------------|--|
| Product name | ARA-290 (Cibinetide) | Molecular formula | $C_{51}H_{84}N_{16}O_{21}$ |
| Batch number | ████ | Molecular weight | 1257.3 g/mol |
| CAS number | 1208243-50-8 | Quantity | 10 mg |
| Date of manufacture | November 2025 | PubChem CID | 91810664 |
| Storage | Powder: -20°C 3 years; 4°C 2 years; 15°C 3 months. | Storage | In solvent: -80°C 6 months; -20°C 1 month; 10°C 1 week |

Amino acid sequence

pGlu-EQLERALNSS (Cibinetide)

11 residues

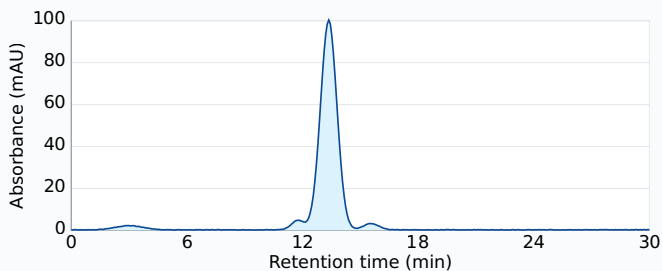
Analytical results

| Test parameter | Method | Specification | Result | Status |
|---------------------------------|---------------------------|----------------------------|-----------------|--------|
| Appearance | Visual | White to off-white powder | Conforms | ✓ |
| Peptide purity | RP-HPLC (C18) | ≥ 98.5% | 99.21% | ✓ |
| Molecular weight confirmation | ESI-MS | 1257.3 ± 1.0 Da | Conforms | ✓ |
| Water content | Karl Fischer | ≤ 10.0% | 5.3% | ✓ |
| Counter-ion content | HPLC | TFA ≤ 0.50% (acetate salt) | 11.8% (acetate) | ✓ |
| Total related substances | RP-HPLC | ≤ 2.0% | 0.79% | ✓ |
| Largest single impurity | RP-HPLC | ≤ 1.0% | 0.37% | ✓ |
| 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

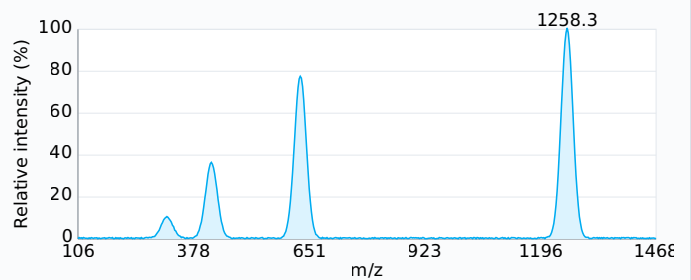


Main peak RT 13.36 min · Area 99.21% · Largest imp 0.37% · Total related 0.79%

Mass spectrum

ESI-MS positive

Electrospray ionisation — positive mode



Observed $[M+H]^+$ 1258.3 · MW 1257.3 g/mol

✓ 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.