

# IGF-1 LR3

Recombinant long-acting analogue of insulin-like growth factor 1

BATCH

IP-IG-261001

This is the code printed on your vial.

APPLICABLE STRENGTHS

- 0.1 mg
- 1 mg

99.54%

SEC-HPLC  
Specification ≥ 99.0%

|                                                                                 |                                                                                            |
|---------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------|
| <div>IDENTITY</div> <div><b>Confirmed</b></div> <div>Mass spectrometry</div>    | <div>ENDOTOXIN</div> <div><b>&lt; 0.125 EU/mg</b></div> <div>Kinetic chromogenic LAL</div> |
| <div>STERILITY</div> <div><b>No growth</b></div> <div>Membrane filtration</div> | <div>ANALYSED</div> <div><b>2 October 2026</b></div> <div>Batch made 1 October 2026</div>  |

Full analytical results

TESTS AND SPECIFICATIONS

Appearance

Visual inspection

SPECIFICATION    White lyophilised powder or cake

RESULT             **Conforms**

STATUS            **PASS**

Purity

SEC-HPLC, monomer, 280 nm

SPECIFICATION     $\geq 99.0\%$

RESULT             **99.54%**

STATUS            **PASS**

Identity

ESI-MS, intact mass

SPECIFICATION     $[M+9H]^{9+} = 1014.07 \pm 0.50$

RESULT             **1014.22**

STATUS            **PASS**

Aggregate content

SEC-HPLC, high molecular weight species

SPECIFICATION     $\leq 1.0\%$

RESULT             **0.11%**

STATUS            **PASS**

Protein content

UV absorbance at 280 nm

SPECIFICATION     $\geq 95.0\%$  of label claim

RESULT             **97.7%**

STATUS            **PASS**

Host cell protein

ELISA

SPECIFICATION     $\leq 100$  ppm

RESULT             **< 35 ppm**

STATUS            **PASS**

Residual host DNA

qPCR

SPECIFICATION     $\leq 10$  ng per vial

RESULT             **< 0.5 ng per vial**

STATUS            **PASS**

## Residual moisture

Karl Fischer titration

SPECIFICATION ≤ 5.0%

RESULT 2.27%

STATUS PASS

## Bacterial endotoxins

Kinetic chromogenic LAL

SPECIFICATION < 1.0 EU/mg

RESULT < 0.125 EU/mg

STATUS PASS

## Sterility

Membrane filtration (USP <71>)

SPECIFICATION No growth

RESULT No growth

STATUS PASS

## Elemental impurities

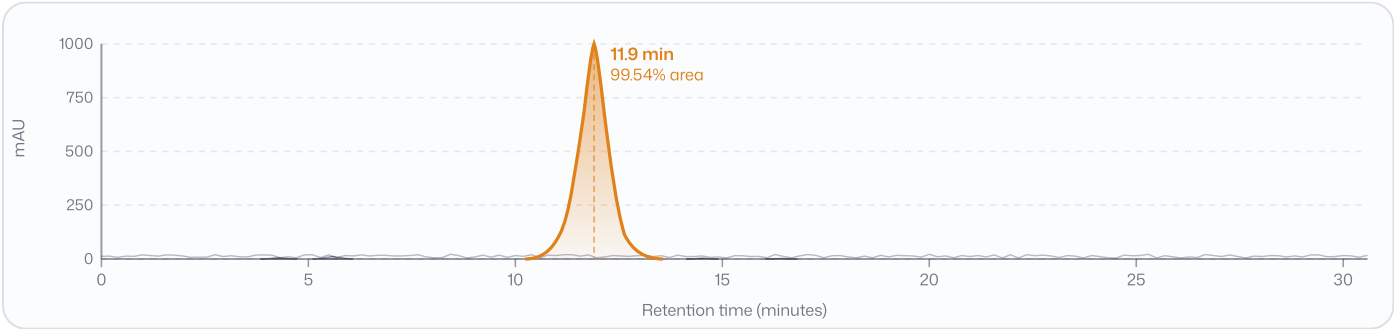
ICP-MS (USP <232> and <233>)

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

RESULT Conforms

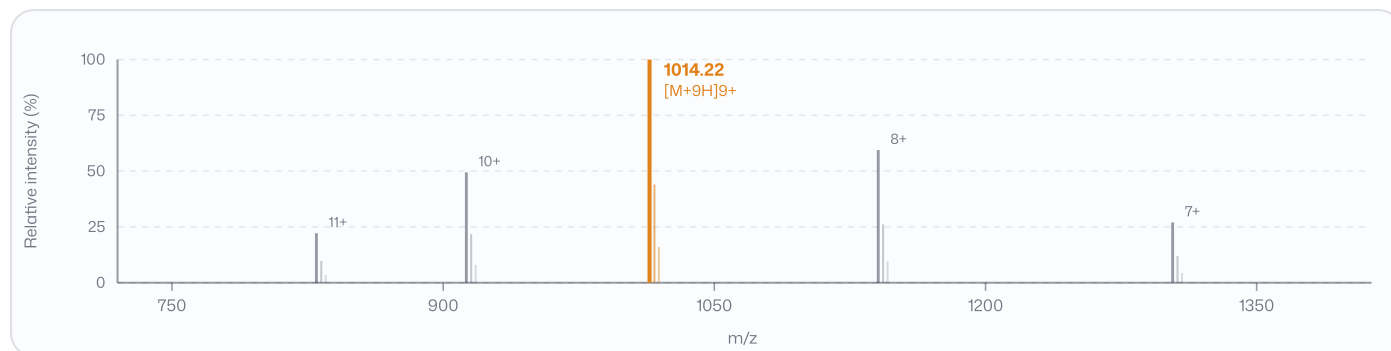
STATUS PASS

## CHROMATOGRAM



Size-exclusion trace for this batch. One dominant peak at 11.9 minutes, 99.54% of the total peak area, largest single impurity 0.11%.

## MASS SPECTRUM



Electrospray ionisation. Expected 1014.07, observed 1014.22, a difference of 0.15 m/z at charge state 9. The neighbouring peaks are the same molecule at the charge states either side of it.

## REFERENCE DATA

### ALSO KNOWN AS

Long R3 IGF-I, LR3-IGF-1

### CAS NUMBER

143045-27-6

### MOLECULAR FORMULA

$C_{400}H_{625}N_{111}O_{115}S_9$

### MOLECULAR WEIGHT

9117.60 g/mol

### MODIFICATIONS

Eighty-three residues: insulin-like growth factor 1 with glutamate 3 replaced by arginine, and a thirteen-residue extension at the front. Three disulfide bonds. The formula and mass shown are for the reduced chain; the folded protein is six hydrogens lighter, at 9111.55 g/mol.

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 2 weeks; do not freeze and thaw

### IN TRANSIT

Stable at ambient temperature for up to 14 days

### RECONSTITUTE WITH

Bacteriostatic water

THE VIAL THIS COVERS



The label on your vial carries the same batch code as this certificate, **IP-IG-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

2 October 2026

ISSUE DATE

4 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-IG-260914

PURITY

99.49%

ANALYSED

15 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.