**pepdream**
CERTIFICATE OF ANALYSIS · LOT RELEASE
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CERTIFICATE NO.
**PL-26-00084**
VERIFICATION KEY
**9W6BTT7M**
Scan or enter both at prymalab.net/testing/verify

CERTIFICATE OF ANALYSIS · LOT RELEASE · ISSUED FOR PEPDREAM

# Retatrutide 30 mg

Lot **PL-2609-084** · Lyophilized powder · Label claim **30 mg/vial** · Distributed as **GIP3-RT**

**TESTED IN-HOUSE BY PRYMALAB**
In-house analytical result, not an independent third-party test

| LOT / BATCH NUMBER | DATE MADE | DATE OF ANALYSIS | DATE ISSUED |
|---|---|---|---|
| **PL-2609-084** | **2026-09-18** | **2026-09-19** | **2026-10-03** |

| RETEST / EXPIRY | UNITS IN LOT / SAMPLED | STORAGE | CERTIFICATE TYPE |
|---|---|---|---|
| **2028-09-18** | **300 / 3** | −20 °C, desiccated, dark | Lot COA, 2 pages |

| COMPOUND | CAS NUMBER | MOLECULAR FORMULA | THEORETICAL MASS (AVG.) |
|---|---|---|---|
| **Retatrutide**<br>LY3437943; GIP/GLP-1/glucagon receptor triple agonist | **2381089-83-2** | $C_{221}H_{342}N_{46}O_{68}$ | 4731.4 Da |

SEQUENCE

H–Y–Aib–QGTFTSDYSI–[αMeLeu]–LDKK(AEEA–γGlu–C20 diacid)AQ–Aib–AFIEYLLEGGPSSGAPPPS–$NH_2$ (39 residues; Aib2, α-methyl-Leu13, Aib20; Lys17 acylated with eicosanedioic acid via γ-Glu and AEEA; C-terminal amide)

PURITY · RP-HPLC, AREA %
**99.38%**
Specification 99.0% • main peak at 8.72 min

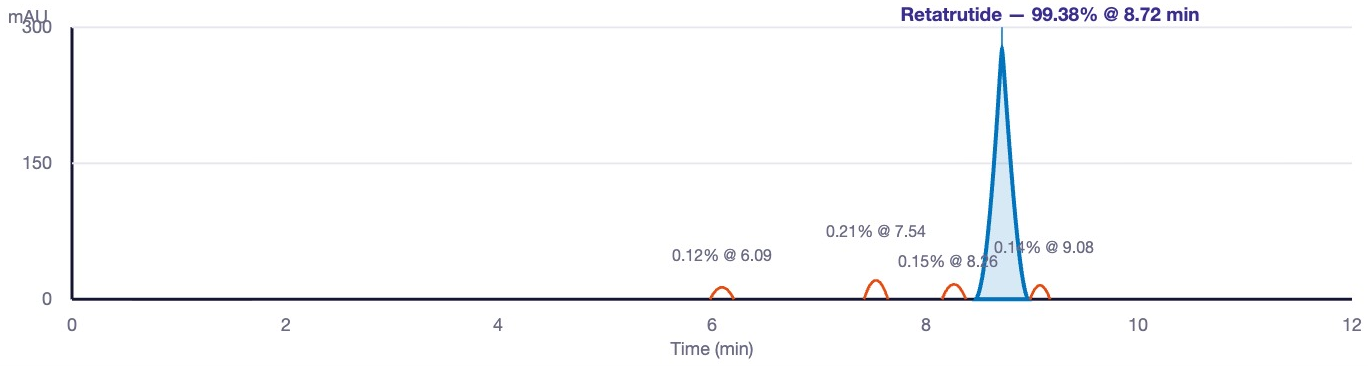
IDENTITY · OBSERVED MASS
**4731.7 Da**
Theoretical 4731.4 Da • +0.3 Da (63 ppm)

OVERALL CONCLUSION
**PASS**
Meets every specification for the tests performed

| TEST | METHOD | SPECIFICATION | RESULT | CONCLUSION |
|---|---|---|---|---|
| **Appearance** | Visual inspection | White to off-white lyophilized powder | White lyophilized powder | **PASS** |
| **Identity (mass)** | LC-MS, ESI positive | Theoretical ± 1.0 Da | 4731.7 Da | **PASS** |
| **Purity** | RP-HPLC, UV 214 nm, area% | 99.0% | 99.38% | **PASS** |
| **Largest impurity** | RP-HPLC, area% | 1.0% | 0.21% at 7.54 min (Gln 3 /Gln 19 deamidation) | **PASS** |
| **Water content** | Karl Fischer | 5.0% | 1.8% | **PASS** |
| **Bacterial endotoxin** | LAL, kinetic | ≤ 5.0 EU/mg | 0.08 EU/mg | **PASS** |
| **Sterility / bioburden** | USP <71>, membrane filtration | No growth after 14 days | No growth; conforms | **PASS** |

## 1 HPLC CHROMATOGRAM

**Data file:** RET_PL-2609-084_20260919_01 · Column C18, 150 × 4.6 mm · UV 214 nm




Baseline uncropped; main peak and impurities labeled with retention times. Peak table on page 2.


**For laboratory research use only.** Not for human or veterinary use.

## 2 HPLC METHOD · RET_PL-2609-084_20260919_01

INSTRUMENT
Waters Alliance e2695, SN E2695B742

DATA SYSTEM
Empower 3, Build 3471

DETECTOR
Waters 2998 PDA

DETECTION WAVELENGTH
214 nm

COLUMN
C18, 150 × 4.6 mm, 3.5 µm

COLUMN PART / SERIAL
186003326 / USHX19500

MOBILE PHASE A
0.1% TFA in water

MOBILE PHASE B
0.1% TFA in MeCN

FLOW RATE
1.0 mL/min

COLUMN TEMPERATURE
40 °C

INJECTION VOLUME
20 µL

RUN TIME
12 min

SAMPLE DILUENT
0.1% TFA in 30% MeCN

SAMPLE CONCENTRATION
0.5 mg/mL

BLANK INJECTED
Yes

REFERENCE STANDARD
In-house Retatrutide reference, lot PL-RS-RET-01, RT 8.69 min

## 3 GRADIENT PROGRAM

| TIME (MIN) | % A | % B |
|---|---|---|
| 0.0 | 65 | 35 |
| 2.0 | 65 | 35 |
| 9.0 | 25 | 75 |
| 10.0 | 15 | 85 |
| 11.0 | 15 | 85 |
| 12.0 | 65 | 35 |

## 4 PEAK TABLE

| PEAK | RT (MIN) | AREA | AREA % |
|---|---|---|---|
| 1 | 6.09 | 5,678 | 0.12 |
| 2 (deamid.) | 7.54 | 9,937 | 0.21 |
| 3 | 8.26 | 7,098 | 0.15 |
| **4** | **8.72** | **4,702,407** | **99.38** |
| 5 | 9.08 | 6,624 | 0.14 |
| Total | | 4,731,744 | 100.00 |

Threshold 0.05% area · Blank subtracted: Y · Purity = main peak area ÷ total integrated area × 100, to two decimals; main peak shaded.

## 5 IDENTITY BY MASS SPECTROMETRY

INSTRUMENT
Waters Acquity SQD

IONIZATION / MODE
ESI, positive

OBSERVED M/Z (CHARGE)
947.3 (5+ [M+5H]) · 789.6 (6+ [M+6H])

DECONVOLUTED MASS
4731.7 Da

THEORETICAL MASS
4731.4 Da

DIFFERENCE
+0.3 Da (63 ppm)

DATA FILE
RET_PL-2609-084_MS_20260919_01

ACCEPTANCE
Within ± 1.0 Da

## 6 ADDITIONAL TESTS

| TEST | PERFORMED BY | DATE | REPORT / FILE |
|---|---|---|---|
| Water content | PrymaLab | 2026-09-19 | RPT-KF-PL-2609-084 |
| Endotoxin | PrymaLab | 2026-09-19 | RPT-ET-PL-2609-084 |
| Sterility | PrymaLab | 2026-09-19 | RPT-ST-PL-2609-084 |
| Peptide content | PrymaLab | 2026-09-19 | RPT-AA-PL-2609-084 |

A test with no row here was not performed on this lot. Outside-laboratory reports, when used, are attached and named below.

## 7 REVIEW AND APPROVAL

**D. Reynolds**
Analyst · performed the testing
Date: 2026-09-19

**S. Calloway**
Reviewer · checked against raw data
Date: 2026-10-02

**M. Phelps**
Lab Director · approved for release
Date: 2026-10-03

Raw data retained at: Empower 3 (Build 3471), project PL-2609, archive PL-ARC-2026; 7 years. Outside laboratory reports attached: None

This certificate applies only to the lot named above and describes the units sampled from it; it is not a guarantee for any other lot. Results were obtained by PrymaLab LLC's own laboratory (PrymaLab Analytical) and are not an independent third-party test unless an outside report is attached. This copy is issued for pepdream, a distributor of the lot; the brand shown does not change the laboratory, the method or the results. Reference values (CAS, formula, theoretical mass, sequence) are literature values for the named compound. Authenticity: scan the QR code or enter certificate number PL-26-00084 and key 9W6BTT7M at prymalab.net/testing/verify; any copy that does not match the record shown there is not a PrymaLab certificate. PrymaLab LLC products are supplied for laboratory research use only and not for human or veterinary use.