# Analytical Evidence Report

HPLC-DAD results for the submitted Retatrutide sample

REPORT NUMBER
WB-RETA-30-092126

GENERATED
September 29, 2026

## Retatrutide

**Results and chromatograms**

Sample 6026_0147 | Client report WB-RETA-30-092126

**Laboratory Analysis: LAB-CA-01**

Laboratory identity and applicable credentials are maintained by Testides and are available to regulatory authorities where required by law.

| VIAL PHOTOGRAPH | |
|---|---|
|  | |

| SAMPLE INFORMATION | |
|---|---|
| Peptide: | **Retatrutide** |
| Sample ID: | **6026_0147** |
| Client ID: | **WB-RETA-30-092126** |
| Label claim: | **30 mg** |

| ANALYSIS | |
|---|---|
| Method: | **HPLC-DAD** |
| Channels: | **214 / 280 nm + spectra** |
| Area metric: | **214 nm blank-excluded** |
| Comparison: | **Reference aligned** |

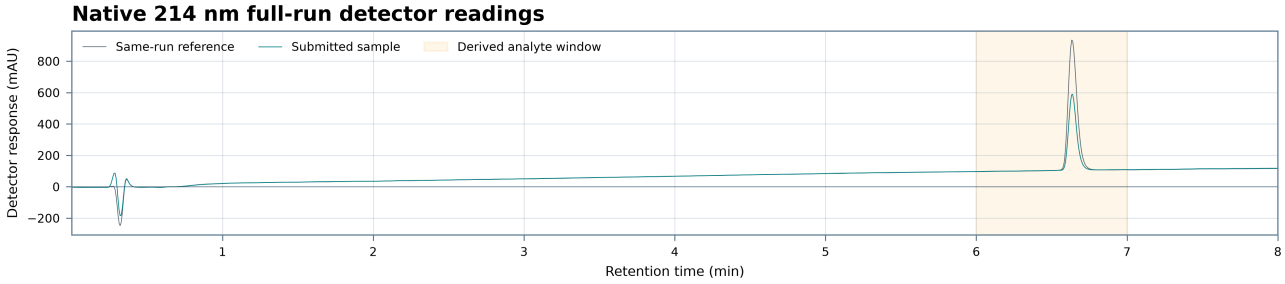
| RUN DETAILS | |
|---|---|
| Run date: | **Sep 26, 2026** |
| First acquired: | **20:12:59 UTC** |
| Last acquired: | **02:04:12 UTC** |
| Run time: | **8.00 min / acquisition** |

## RESULTS AT A GLANCE

| PROJECTED AMOUNT | HPLC PURITY | CONTENT VS. LABEL | REFERENCE ALIGNMENT |
|---|---|---|---|
| **32.81 mg†** | **99.26%** | **109.4%** | **Observed** |
| BASED ON SAMPLE PREPARATION | 214 NM AREA PERCENT, LIMIT 0.324% | 32.81 MG OF 30 MG CLAIMED | RETENTION TIME + UV PROFILE** |

## CHROMATOGRAM

**Complete run - 214 nm detector response**



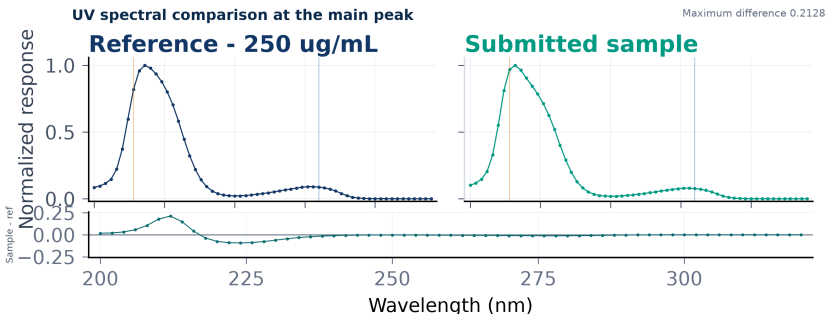

## HPLC PURITY (214 NM)

| Peptide + related | Main peak area % | Reporting limit | UV match |
|---|---|---|---|
| **99.26%** | **99.26%** | **0.324%** | **1.00000** |
| Main peak and UV-matched forms | 1 injection(s) | Smallest reportable peak | Sample vs. reference |

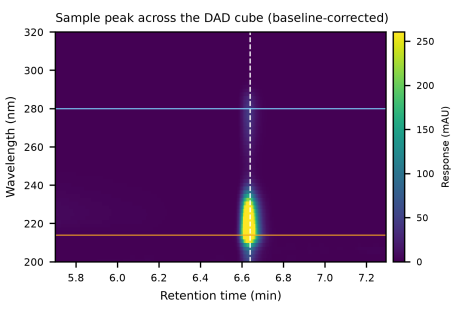
Purity is the main peak's share of the total integrated peak area at 214 nm, measured from the native detector readings. Peaks below 0.324% of total area cannot be resolved from this run's baseline and are not counted. This result rests on a single injection; no duplicate was run.

## UV SPECTRAL COMPARISON

**Native wavelength samples - baseline-corrected, normalized; no smoothing**




**UV response through the sample peak**




The complete acquisition is shown without smoothing or resampling: 1,200 native readings on the 214 nm channel.

* HPLC purity is the main peak's share of total integrated peak area at 214 nm. Peaks below 0.324% of total area are not resolvable from this run's baseline; every peak is itemised on page 3.

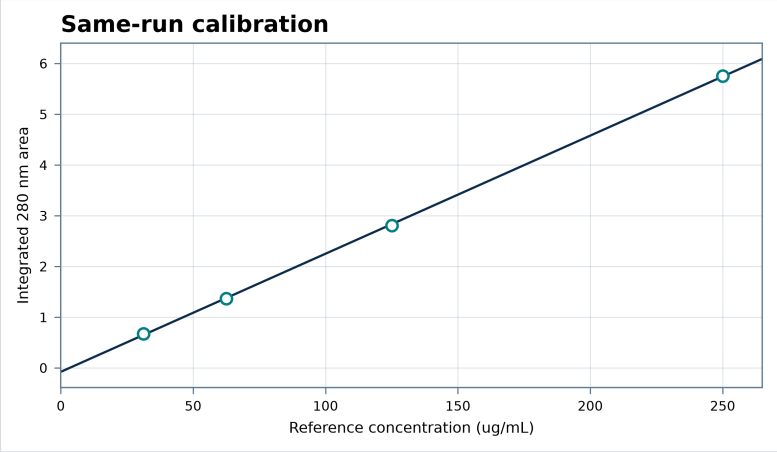
** Reference alignment: retention time within the same-run standards' range or within ±5% of their mean, and a UV match (220-300 nm cosine) at or above the standards' lowest or 0.999.

## Retatrutide

Sample 6026_0147 | Client report WB-RETA-30-092126

**Reference comparison and calculation**

## CONCENTRATION CALIBRATION - 280 NM



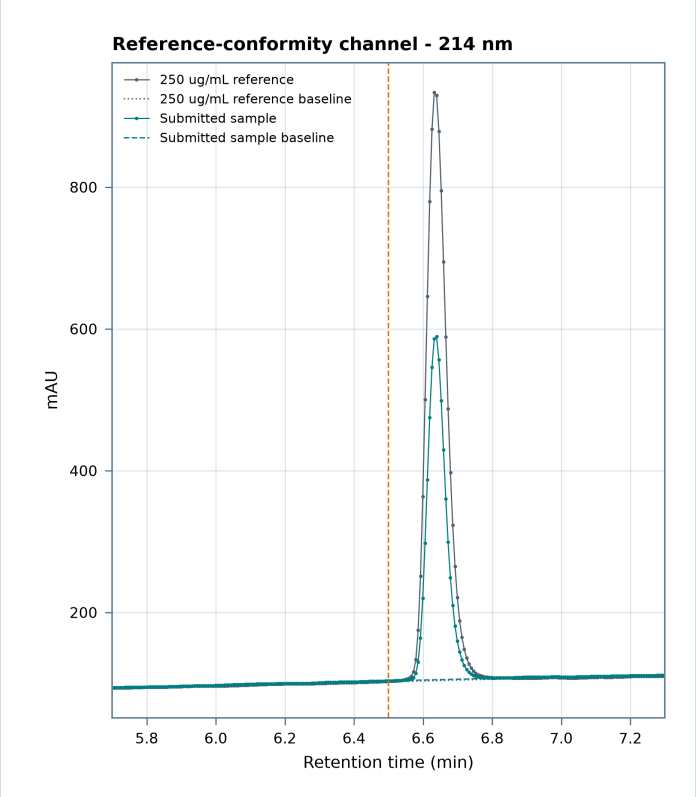

| ug/mL | Area | Recovery |
|---|---|---|
| 31.25 | 0.67036 | 102.85% |
| 62.5 | 1.36908 | 99.44% |
| 125 | 2.80807 | 99.17% |
| 250 | 5.75401 | 100.20% |

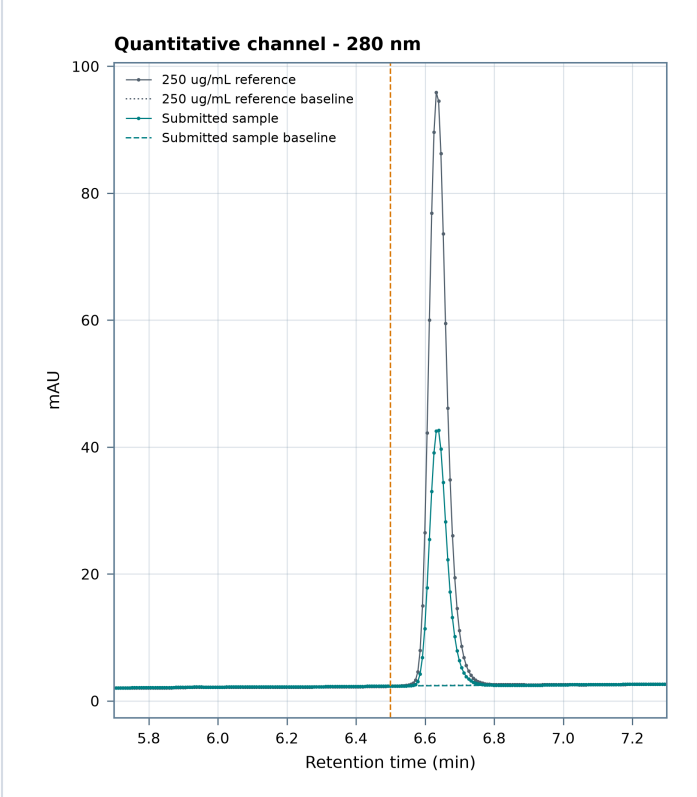
Area = 0.02328173C -0.07794911
Unweighted OLS | R2 0.9999202
**Sample area 2.4685 = 109.38 ug/mL x 2 mL x 150 / 1000 = 32.81 mg**

**UV spectra were recorded from 190-400 nm across the run**

The integration method and the full peak table are on page 3.

## MAIN PEAK COMPARED WITH THE SAME-RUN REFERENCE




Native acquisition points with the exact quantitative baselines; the dashed line marks the reference retention-time centre.

** Reference alignment: retention time within the same-run standards' range or within ±5% of their mean, and a UV match (220-300 nm cosine) at or above the standards' lowest or 0.999.

## Retatrutide

Definitions, calculation detail, and scope

Sample 6026_0147 | Client report WB-RETA-30-092126

## HOW TO READ THIS REPORT

Start with the result on page 1. Pages 2 and 3 show the comparisons, calculations, and limits behind it.

**01** **Complete chromatogram**

Shows the main peak in the context of the full detector run.

**02** **Integrated peak table**

Lists every peak counted towards the purity result, and every peak not.

**03** **UV comparison**

Compares the peak's UV pattern with the same-run reference.

## WHAT THE UV COMPARISON ADDS

**What diode-array detection adds to the comparison**

### What it adds

Retention time tells us when the peak left the column; DAD records its UV fingerprint across many wavelengths. Alignment requires both: retention time within the same-run standards' range or ±5% of their mean, and a UV match at or above the standards' lowest or 0.999.

### What it can reveal

A UV fingerprint that changes across the peak can indicate hidden co-elution. Here, apex cosine similarity is 0.999999 and minimum within-peak cosine is 0.999994, supporting close reference alignment and spectral uniformity.

**Identity: retention time and UV spectrum are both compared with the reference standards.**

## HOW THE PURITY RESULT WAS MEASURED

**214 nm area percent, measured from the native detector readings**

The run's blank injections give the baseline and the detection floor. Each injection is corrected against the blanks bracketing it in time, every peak is integrated to a valley-to-valley baseline, and purity is the main peak's share of the total counted area.

**Purity (%) = main peak area / total counted peak area x 100**

| RT (min) | Area | Area % | Classification | UV vs main | Counted |
|---|---|---|---|---|---|
| **6.639** | **30.7792** | **99.258** | **Main peak** | **-** | **Counted** |
| 1.622 | 0.1181 | 0.387 | impurity | 0.978 | Counted |
| 2.696 | 0.1084 | 0.355 | impurity | 0.976 | Counted |

**Reporting limit 0.324% of total area | counted peaks 2 | injections 1**

Area percent assumes every peak absorbs at 214 nm like the main peak.

Content vs. label: Recovered mass is calculated from the same-run calibration and the sample preparation recorded for this vial, against reference material at its stated concentration. The bracketing quality-control injections verify that calibration held across the run; the vial's reconstitution and dilution are recorded by the laboratory and are not independently measured here.

## WHAT THIS REPORT CAN AND CANNOT TELL YOU

**The report explains the measurement; it does not decide how a material should be used**

### Observed evidence

Chromatograms, reference and blank comparisons, and classified peaks.

### Calculated results

Area-percent purity, concentration, projected amount, and calibration trace.

### Method context

Retention time (standards' range or ±5%) and UV match (standards' lowest or 0.999).

### Safety and regulatory status

No conclusion on safety, efficacy, fitness for use, or regulatory status.

**This analytical record does not authorize or endorse manufacture, sale, marketing, distribution, or use of the material.**