**PrymaLab**
PRYMALAB ANALYTICAL · IN-HOUSE LABORATORY
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CERTIFICATE NO.
**PL-26-00226**
VERIFICATION KEY
**YLVSRYJP**
Scan or enter both at prymalab.net/testing/verify

CERTIFICATE OF ANALYSIS · LOT RELEASE

# KLOW Blend 80 mg

Lot **PL-2610-112** · Lyophilized co-blend powder · Label claim **80 mg/vial**

**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-2610-112 | 2026-10-05 | 2026-10-06 | 2026-10-20 |
| **RETEST / EXPIRY** | **UNITS IN LOT / SAMPLED** | **STORAGE** | **CERTIFICATE TYPE** |
| 2028-10-05 | 325 / 2 | −20 °C, desiccated, dark | Lot COA, 2 pages |

**COMPOUND**
**KLOW Blend**
GHK-Cu + BPC-157 + TB-500 + KPV co-lyophilized blend

**CAS NUMBER**
89030-95-5 · 137525-51-0 · 77591-33-4 · 67727-97-3

**MOLECULAR FORMULA**
—

**THEORETICAL MASS (AVG.)**
401.91 · 1,419.55 · 4,963.44 · 342.43 Da (GHK-Cu / BPC-157 / TB-500 / KPV)

**COMPOSITION AND SEQUENCES**
**GHK-Cu:** GHK-Cu(II) · **BPC-157:** GEPPPGKPADDAGLV · **TB-500:** Ac-43-aa Tbeta4 · **KPV:** KPV

PURITY · RP-HPLC, AREA %
**99.37%**
Lowest component (BPC-157) • specification ≥ 99.0 % for every component

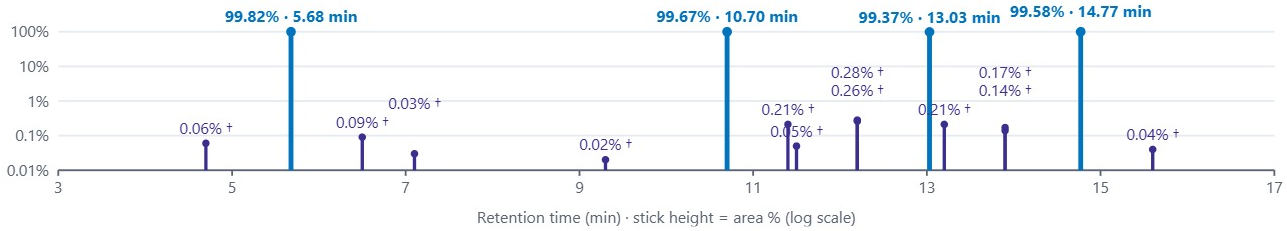
IDENTITY · COMPONENTS CONFIRMED
**4 / 4**
Components confirmed by LC-MS within ± 1.0 Da: 401.90 / 1,419.53 / 4,963.43 / 342.42 Da

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

| TEST | METHOD | SPECIFICATION | RESULT | CONCLUSION |
|---|---|---|---|---|
| **GHK-Cu: purity · largest impurity · mass** | RP-HPLC 214 nm (area %); LC-MS, ESI+ | ≥ 99.0 % · ≤ 1.0% · ± 1.0 Da | 99.67 % · 0.26 % · 401.90 Da | PASS |
| **BPC-157: purity · largest impurity · mass** | RP-HPLC 214 nm (area %); LC-MS, ESI+ | ≥ 99.0 % · ≤ 1.0% · ± 1.0 Da | 99.37 % · 0.28 % · 1,419.53 Da | PASS |
| **TB-500: purity · largest impurity · mass** | RP-HPLC 214 nm (area %); LC-MS, ESI+ | ≥ 99.0 % · ≤ 1.0% · ± 1.0 Da | 99.58 % · 0.21% · 4,963.43 Da | PASS |
| **KPV: purity · largest impurity · mass** | RP-HPLC 214 nm (area %); LC-MS, ESI+ | ≥ 99.0 % · ≤ 1.0% · ± 1.0 Da | 99.82 % · 0.09 % · 342.42 Da | PASS |
| **Water content** | Karl Fischer | ≤ 5.0 % | 2.79 % | PASS |
| **Bacterial endotoxin** | LAL, kinetic | ≤ 5.0 EU/mg | 0.469 EU/mg | PASS |
| **Sterility** | USP <71>, 14-day | No growth | No growth | PASS |

## 1 HPLC CHROMATOGRAM

**Data file:** PL-2610-112-HPLC.raw · Column C18, 150 × 4.6 mm · UV 214 nm




Peak plot drawn from the integrated peak table (area %, log scale); it is not the instrument trace, which is retained in PL-2610-112-HPLC.raw. † Nominal reference retention time for the assigned impurity; the main-peak RT is observed in this lot. Area % is per component (each component main peak + its impurities = 100%).


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

## 2 HPLC METHOD · PL-2610-112-HPLC.RAW

**INSTRUMENT**
Waters Alliance e2695

**DETECTION WAVELENGTH**
214 nm

**COLUMN**
C18, 150 × 4.6 mm, 3.5 µm

**MOBILE PHASE A**
0.1 % TFA in water

**MOBILE PHASE B**
0.1 % TFA in MeCN

**GRADIENT**
5–95 % B over 25 min (linear)

**FLOW RATE**
1.0 mL/min

**COLUMN TEMPERATURE**
40 °C

**INJECTION VOLUME**
10 µL

## 3 GRADIENT PROGRAM

| TIME (MIN) | % A | % B |
|---|---|---|
| 0.0 | 95 | 5 |
| 25.0 | 5 | 95 |

## 4 PEAK TABLE

| PEAK | RT (MIN) | AREA | AREA % |
|---|---|---|---|
| 1 | 4.70 † | — | 0.06 |
| 2 | 5.68 | — | 99.82 |
| 3 | 6.50 † | — | 0.09 |
| 4 | 7.10 † | — | 0.03 |
| 5 | 9.30 † | — | 0.02 |
| 6 | 10.70 | — | 99.67 |
| 7 | 11.40 † | — | 0.21 |
| 8 | 11.50 † | — | 0.05 |
| 9 | 12.20 † | — | 0.26 |
| 10 | 12.20 † | — | 0.28 |
| **11** | **13.03** | **—** | **99.37** |
| 12 | 13.20 † | — | 0.21 |
| 13 | 13.90 † | — | 0.14 |
| 14 | 13.90 † | — | 0.17 |
| 15 | 14.77 | — | 99.58 |
| 16 | 15.60 † | — | 0.04 |

Main peaks: 2 KPV · 6 GHK-Cu · 11BPC-157 · 15 TB-500; all other peaks are the assigned impurities of the neighbouring component · area % within each component (main + impurities = 100% per component) · † nominal reference RT · Purity = main peak area ÷ total integrated area × 100, to two decimals; main peak shaded.

## 5 IDENTITY BY MASS SPECTROMETRY

**INSTRUMENT**
Waters SQD

**IONIZATION / MODE**
ESI, positive

**DECONVOLUTED MASS**
401.90 / 1,419.53 / 4,963.43 / 342.42 Da

**THEORETICAL MASS**
401.91 / 1,419.55 / 4,963.44 / 342.43 Da

**ORDER**
GHK-Cu / BPC-157 / TB-500 / KPV

**DIFFERENCE**
−0.01 / −0.02 / −0.01 / −0.01 Da

**DATA FILE**
PL-2610-112-MS.d

**ACCEPTANCE**
Within ± 1.0 Da (each component)

## 6 ADDITIONAL TESTS

| TEST | PERFORMED BY | DATE | REPORT / FILE |
|---|---|---|---|
| Water content (Karl Fischer) | PrymaLab Analytical | 2026-10-06 | — |
| Endotoxin (LAL, kinetic) | PrymaLab Analytical | 2026-10-06 | — |
| Sterility (USP <71>, day-14 read-out) | PrymaLab Analytical | 2026-10-20 | — |

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: 2026-10-20

**S. Calloway**
Reviewer · checked against raw data
Date: 2026-10-20

**M. Phelps**
Lab Director · approved for release
Date: 2026-10-20

Raw data retained at: Empower 3, project PL-2610, 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. Reference values (CAS, formula, theoretical mass, sequence) are literature values for the named compound. Authenticity: scan the QR code or enter certificate number PL-26-00226 and key YLVSRYJP 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.