

CERTIFICATE NO.

PL-26-00011

VERIFICATION KEY

UJWEQS9S

Scan or enter both at

prymalab.net/testing/verify

CERTIFICATE OF ANALYSIS · LOT RELEASE · ISSUED FOR PURAVIUM

Wolverine Blend (BPC-157 10 mg + TB-500 10 mg)

Lot PL-2609-011 · Lyophilized co-blend powder · Label claim 20 mg/vial · Distributed as BPC-157 / TB-500

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-2609-011	2026-09-17	2026-09-19	2026-10-03
RETEST / EXPIRY	UNITS IN LOT / SAMPLED	STORAGE	CERTIFICATE TYPE
2028-09-17	250 / 2	-20 °C, desiccated, dark	Lot COA, 2 pages

COMPOUND	CAS NUMBER	MOLECULAR FORMULA	THEORETICAL MASS (AVG.)
Wolverine Blend	137525-51-0 · 77591-33-4	C ₆₂ H ₉₈ N ₁₆ O ₂₂ · C ₂₁₂ H ₃₅₀ N ₅₆ O ₇₈ S	1419.6 · 4963.5 Da (BPC-157 / TB-500 (Thymosin β4))
BPC-157 + TB-500 co-lyophilized 1:1 blend			

COMPOSITION AND SEQUENCES

BPC-157 10 mg: H-GEPPPGKPADDAGLV-OH (15 residues; free N- and C-termini) · **TB-500 (Thymosin β4) 10 mg:** Ac-SDKPDMAEIEKFDKSKLKKKTETQEKNPLPSKETIEQE KQAGES-OH (43 residues; N-acetyl; free C-terminus)

PURITY · RP-HPLC, AREA %

99.65%

Specification 99.0% (blend, sum of both component peaks)

IDENTITY · OBSERVED MASS

2 / 2

Components confirmed by LC-MS within ± 1.0 Da:
1419.8 / 4963.7 Da

OVERALL CONCLUSION

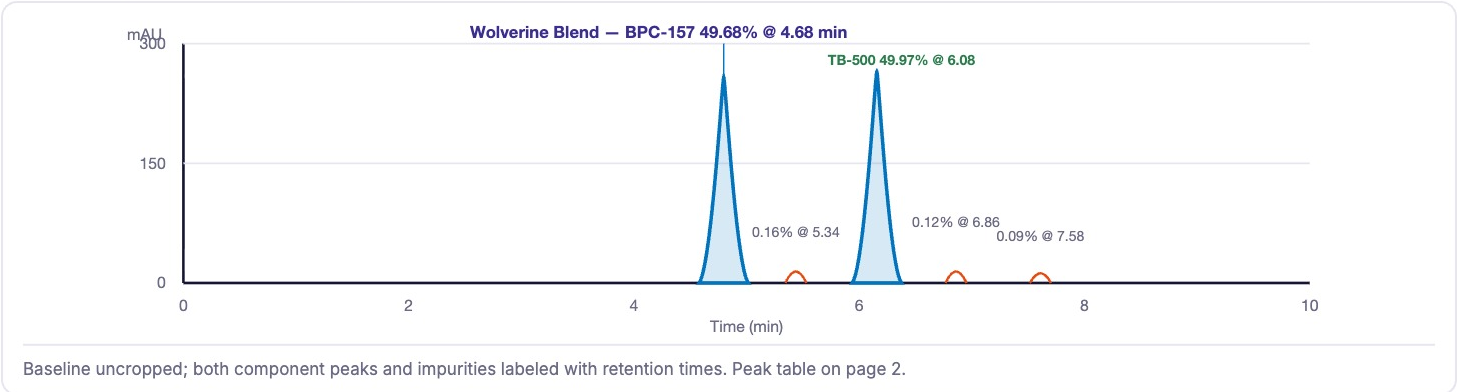
PASS

Meets every specification for the tests performed

TEST	METHOD	SPECIFICATION	RESULT	CONCLUSION
Appearance	Visual inspection	White to off-white lyophilized powder or cake	White lyophilized powder	PASS
Identity (mass)	LC-MS, ESI positive	Theoretical ± 1.0 Da, each component	1419.8 Da (BPC-157) · 4963.7 Da (TB-500)	PASS
Purity	RP-HPLC, UV 214 nm, area%	99.0% (blend)	99.65%	PASS
Largest impurity	RP-HPLC, area%	1.0%	0.16% at 5.34 min	PASS
Water content	Karl Fischer	5.0%	2.0%	PASS
Bacterial endotoxin	LAL, kinetic	≤ 5.0 EU/mg	0.12 EU/mg	PASS
Sterility / bioburden	USP <71>, membrane filtration	No growth after 14 days	No growth; conforms	PASS

1 HPLC CHROMATOGRAM

Data file: WLVL-2609-011_20260919_01 · Column C18, 150 × 4.6 mm · UV 214 nm



2 HPLC METHOD · WLV_PL-2609-011_20260919_01

INSTRUMENT	DATA SYSTEM	DETECTOR
Waters Alliance e2695, SN E2695B742	Empower 3, Build 3471	Waters 2998 PDA
DETECTION WAVELENGTH	COLUMN	COLUMN PART / SERIAL
214 nm	C18, 150 × 4.6 mm, 3.5 µm	186003326 / USHX18211
MOBILE PHASE A	MOBILE PHASE B	FLOW RATE
0.1% TFA in water	0.1% TFA in MeCN	1.0 mL/min
COLUMN TEMPERATURE	INJECTION VOLUME	RUN TIME
30 °C	20 µL	10 min
SAMPLE DILUENT	SAMPLE CONCENTRATION	BLANK INJECTED
Water, 0.1% TFA	0.5 mg/mL (blend)	Yes
REFERENCE STANDARD	In-house Wolverine blend reference, lot PL-RS-WLV-01, component RTs 4.66 / 6.06 min	

3 GRADIENT PROGRAM

TIME (MIN)	% A	% B
0.0	95	5
3.0	95	5
7.0	55	45
8.0	20	80
9.0	20	80
10.0	95	5

4 PEAK TABLE

PEAK	RT (MIN)	AREA	AREA %
1 (BPC-157)	4.68	2,136,240	49.68
2	5.34	6,880	0.16
3 (TB-500)	6.08	2,148,710	49.97
4	6.86	5,160	0.12
5	7.58	3,870	0.09
Total		4,300,000	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	IONIZATION / MODE	OBSERVED M/Z (CHARGE)
Waters Acquity SQD	ESI, positive	1420.3 (1+ [M+H]) · 1442.2 (1+ [M+Na], BPC-157) · 1241.9 (4+ [M+4H]) · 993.7 (5+ [M+5H], TB-500)
DECONVOLUTED MASS	THEORETICAL MASS	DIFFERENCE
1419.8 / 4963.7 Da (by component)	1419.6 / 4963.5 Da (BPC-157 / TB-500)	≤ +0.2 Da (per component)
DATA FILE	ACCEPTANCE	
WLV_PL-2609-011_MS_20260919_01	Within ± 1.0 Da (each component)	

6 ADDITIONAL TESTS

TEST	PERFORMED BY	DATE	REPORT / FILE
Water content	PrymaLab	2026-09-20	RPT-KF-PL-2609-011
Endotoxin	PrymaLab	2026-09-21	RPT-ET-PL-2609-011
Sterility	PrymaLab	2026-10-02	RPT-ST-PL-2609-011
Peptide content (blend assay)	PrymaLab	2026-09-20	RPT-AA-PL-2609-011

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	S. Calloway	M. Phelps
Analyst · performed the testing	Reviewer · checked against raw data	Lab Director · approved for release
Date: 2026-09-19	Date: 2026-10-02	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 Puravium, 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-26-00011 and key UJWEQS9S 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.