Alpha Tides

CERTIFICATE OF ANALYSIS · LOT RELEASE

alphatides.net

CERTIFICATE NO.
PL-26-00077

VERIFICATION KEY
D5P9QVDK

Scan or enter both at prymalab.net/testing/verify

CERTIFICATE OF ANALYSIS · LOT RELEASE · ISSUED FOR ALPHA TIDES

PNC-27 5 mg

Lot **PL-2609-077** · Lyophilized powder · Label claim **5 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-2609-077	2026-09-22	2026-09-24	2026-10-03

RETEST / EXPIRY	UNITS IN LOT / SAMPLED	STORAGE	CERTIFICATE TYPE
2028-09-22	250 / 2	−20 °C, desiccated, dark	Lot COA, 2 pages

COMPOUND	CAS NUMBER	MOLECULAR FORMULA	THEORETICAL MASS (AVG.)
PNC-27 p53(12–26) fused to a membrane-residency peptide	1159861-00-3	$C_{188}H_{293}N_{53}O_{44}S$	4031.7 Da

SEQUENCE

H-PPLSQETFSDLWKLLKKWKMRRNQFWVKVQRG-OH (32 residues; p53 residues 12–26 followed by the membrane-residency peptide; free N- and C-termini)

PURITY · RP-HPLC, AREA %
99.62%
Specification 99.0% • main peak at 7.27 min

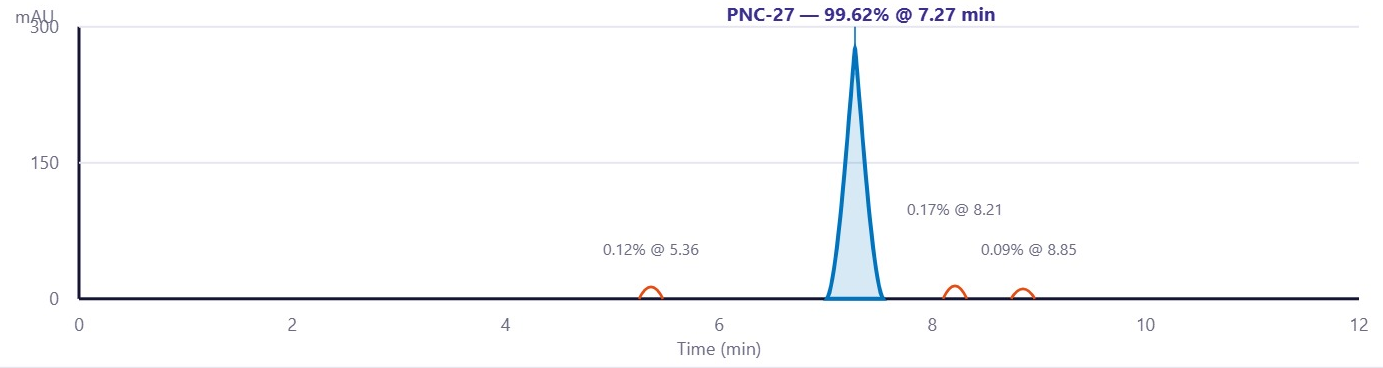
IDENTITY · OBSERVED MASS
4,032.1 Da
Theoretical 4,031.7 Da • +0.4 Da (99 ppm)

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	4,032.1 Da ([M+4H] 4+ 1009.0 · [M+5H] 5+ 807.4)	PASS
Purity	RP-HPLC, UV 214 nm, area%	99.0%	99.62%	PASS
Largest impurity	RP-HPLC, area%	1.0%	0.17% at 8.21 min	PASS
Water content	Karl Fischer	5.0%	2.1%	PASS
Bacterial endotoxin	LAL, kinetic	≤ 5.0 EU/mg	0.07 EU/mg	PASS
Sterility / bioburden	USP <71>, membrane filtration	No growth after 14 days	No growth; conforms	PASS

1 HPLC CHROMATOGRAM

Data file: PNC27_PL-2609-077_20260924_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.

Verify: prymalab.net/testing/verify · PL-26-00077 · key D5P9QVDK

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

2 HPLC METHOD · PNC27_PL-2609-077_20260924_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 / USHX18211

MOBILE PHASE A
0.1% TFA in water

MOBILE PHASE B
0.1% TFA in MeCN

FLOW RATE
1.0 mL/min

COLUMN TEMPERATURE
30 °C

INJECTION VOLUME
20 µL

RUN TIME
12 min

SAMPLE DILUENT
Water, 0.1% TFA

SAMPLE CONCENTRATION
0.5 mg/mL

BLANK INJECTED
Yes

REFERENCE STANDARD
In-house PNC-27 reference, lot PL-RS-PNC27-01, RT 7.23 min

3 GRADIENT PROGRAM

TIME (MIN)	% A	% B
0.0	95	5
2.0	95	5
8.0	55	45
9.5	20	80
10.5	20	80
12.0	95	5

4 PEAK TABLE

PEAK	RT (MIN)	AREA	AREA %
1	5.36	4,500	0.12
2	**7.27**	**3,735,750**	**99.62**
3	8.21	6,375	0.17
4	8.85	3,375	0.09
Total		3,750,000	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
Waters Acquity SQD

IONIZATION / MODE
ESI, positive

OBSERVED M/Z (CHARGE)
1009.0 (4+ [M+4H]) · 807.4 (5+ [M+5H])

DECONVOLUTED MASS
4,032.1 Da

THEORETICAL MASS
4,031.7 Da

DIFFERENCE
+0.4 Da (99 ppm)

DATA FILE
PNC27_PL-2609-077_MS_20260924_01

ACCEPTANCE
Within ± 1.0 Da

6 ADDITIONAL TESTS

TEST	PERFORMED BY	DATE	REPORT / FILE
Water content	PrymaLab	2026-09-25	RPT-KF-PL-2609-077
Endotoxin	PrymaLab	2026-09-26	RPT-ET-PL-2609-077
Sterility	PrymaLab	2026-09-24	RPT-ST-PL-2609-077

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: 2026-09-24

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 Alpha Tides, 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-26-00077 and key D5P9QVDK 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.