PrymaLab
PRYMALAB ANALYTICAL · IN-HOUSE LABORATORY
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CERTIFICATE NO.
PL-26-00126
VERIFICATION KEY
26NUPXWW
Scan or enter both at prymalab.net/testing/verify

CERTIFICATE OF ANALYSIS · LOT RELEASE

5-Amino-1MQ 50 mg Capsules (60 ct)

Lot PL-2610-003 · Capsules · Label claim 50 mg per capsule

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-2610-003	2026-10-01	2026-10-02	2026-10-08
RETEST / EXPIRY	**UNITS IN LOT / SAMPLED**	**STORAGE**	**CERTIFICATE TYPE**
2028-10-01	238 / 2	—	Lot COA, 2 pages

COMPOUND
5-Amino-1MQ
5-Amino-1-methylquinolinium iodide (NNMT inhibitor); small molecule, not a peptide

CAS NUMBER
42464-96-0

MOLECULAR FORMULA
$C_{10}H_{11}N_2 \cdot I$ (cation $C_{10}H_{11}N_2^+$)

THEORETICAL MASS (AVG.)
286.11 Da (iodide salt) · 159.09 Da (cation)

STRUCTURE
5-Amino-1-methylquinolinium iodide; the 159.09 Da cation is the species observed by ESI-MS

PURITY · RP-HPLC, AREA %
99.83%
Specification ≥ 99.0 % • main peak at 10.38 min

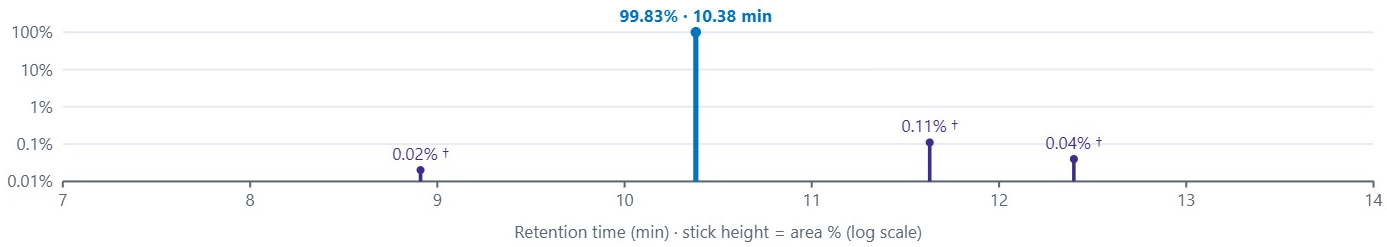
IDENTITY · OBSERVED MASS
159.08 Da
Theoretical cation 159.09 Da • −0.01 Da (63 ppm)

OVERALL CONCLUSION
PASS
Meets every specification for the tests performed

TEST	METHOD	SPECIFICATION	RESULT	CONCLUSION
Identity (mass)	LC-MS, ESI positive	Theoretical ± 1.0 Da	159.08 Da	**PASS**
Purity	RP-HPLC, UV 254–306 nm, area %	≥ 99.0 %	99.83 %	**PASS**
Largest impurity	RP-HPLC, area %	≤ 1.0%	0.11% (RT 11.63)	**PASS**
Capsule content	Content vs label claim	45–55 mg/cap	49.32 mg/cap	**PASS**
Bacterial endotoxin	LAL, kinetic	—	—	N/A
Aerobic count (TAMC)	USP <61>	< 10 CFU/g	< 10 CFU/g	**PASS**
Yeast &mold (TYMC)	USP <61>	< 10 CFU/g	< 10 CFU/g	**PASS**
E. coli	USP <62>	Absent	Absent	**PASS**

1 HPLC CHROMATOGRAM

Data file: PL-2610-003-HPLC.raw · Column C18, 150 × 4.6 mm · UV 254–306 nm



Peak plot drawn from the integrated peak table (area %, log scale); it is not the instrument trace, which is retained in PL-2610-003-HPLC.raw. † Nominal reference retention time for the assigned impurity; the main-peak RT is observed in this lot.

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

2 HPLC METHOD · PL-2610-003-HPLC.RAW

INSTRUMENT
Waters Alliance e2695

DATA SYSTEM
Empower 3

DETECTOR
UV absorbance

DETECTION WAVELENGTH
254–306 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	8.91 †	—	0.02
2	**10.38**	**—**	**99.83**
3	11.63 †	—	0.11
4	12.40 †	—	0.04
Total		—	100.00

Peaks: 1 related substance a; 2 main peak (5-Amino-1MQ); 3 related substance b; 4 related substance c · Area % from the integrated peak table (absolute areas are not part of the lot-release export) · † nominal reference RT for the assigned impurity · 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

REFERENCE M/Z (ION)
159.09 [M]+

DECONVOLUTED MASS
159.08 Da

THEORETICAL MASS
159.09 Da (cation)

DIFFERENCE
−0.01 Da (63 ppm)

DATA FILE
PL-2610-003-MS.d

ACCEPTANCE
Within ± 1.0 Da

6 ADDITIONAL TESTS

TEST	PERFORMED BY	DATE	REPORT / FILE
Content vs label claim	PrymaLab Analytical	2026-10-02	—
Microbial limits (USP <61>/<62>)	PrymaLab Analytical	2026-10-08	—

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: 2026-10-08

S. Calloway
Reviewer · checked against raw data
Date: 2026-10-08

M. Phelps
Lab Director · approved for release
Date: 2026-10-08

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-26-00126 and key 26NUPXWW 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.