TEST REPORT

E-mail: lin@peptideformulationlab.com
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Task Number #738905

Testing ordered > 18 Jul '26

Sample received > 21 Jul '26

Client	ShiLai™ Peptide Technologies
Sample	5-Amino-1MQ (100 mg)
Manufacturer	ShiLai™ Peptide Technologies
Batch	AR1636RT2

Sample description >

See picture or pictures attached.

Tests requested >

Assessment of a peptide cartridges.

Results >

5-Amino-1MQ	100.97mg
Assay (HPLC)	100.0%
Identity (MS)	Confirmed
Purity	99.84%
Related Impurities	≤0.8%
pH	5.8 ± 0.2
Endotoxin	<0.5 EU/mg
Sterility	Pass

Analysis conducted > 24 Oct 2026

Signature >

Go to the website peptideformulationlab.com and contact the relevant person in charge to verify this test document.

82LX3074QW9K

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The photo of sample：



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5-Amino-1MQ (5-Amino-1-methylquinolinium) - Stability by HPLC (100mg)

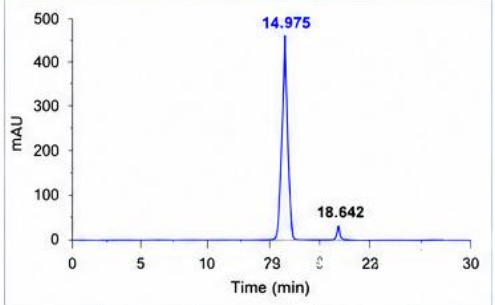
Product Name	:	5-Amino-1MQ (5-Amino-1-methylquinolinium)	**Sample Conc.**	:	33.333 mg/mL
Batch No.	:	AR1636RT2	**System**	:	Agilent 1260 Infinity II
Strength	:	100 mg / Vial	**Software**	:	OpenLAB CDS
Diluent	:	Mobile Phase	**Run Time**	:	30 min
Column	:	Waters XBridge BEH C18, 4.6 × 150 mm, 3.5 µm	**Wavelength**	:	254 nm
Mobile Phase	:	A: 0.1% TFA in Water B: 0.1% TFA in Acetonitrile	**Data Rate**	:	10 Hz
Gradient	:	5% B to 60% B in 30 min	**Study Condition**	:	Reconstituted and stored at 2–8 °C
Flow Rate	:	1.0 mL/min	**Evaluation**	:	Area Normalization
Column Temp	:	30 °C	**Report Date**	:	2026-10-24
Detection	:	UV 254 nm			
Injection Vol.	:	10 µL			

SUMMARY OF RESULTS (2–8 °C)

Time Point	Assay (%)	Purity (%)	Total Impurities (%)	pH
Day 0	99.58	99.32	0.42	7.15
Day 30	99.51	99.25	0.49	7.17
Day 60	99.47	99.21	0.53	7.16
Day 90	99.43	99.17	0.57	7.15

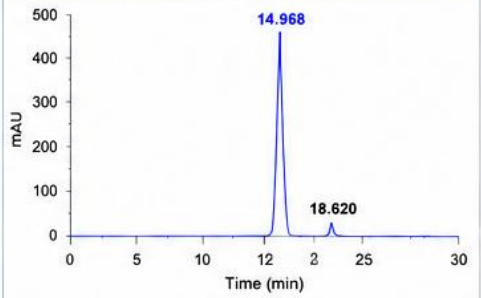
HPLC CHROMATOGRAMS (UV 254 nm)

Day 0 (Initial)



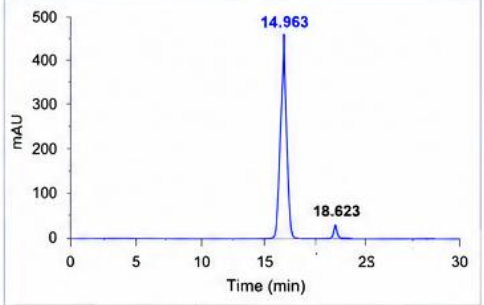
Peak No.	Retention Time (min)	Peak Name	Area (mAU-s)	Area (%)
1	14.975	5-Amino-1MQ	9,866.5	99.33
2	18.642	Impurity 1	66.3	0.67
Total	-	-	9,932.8	100.00

Day 30



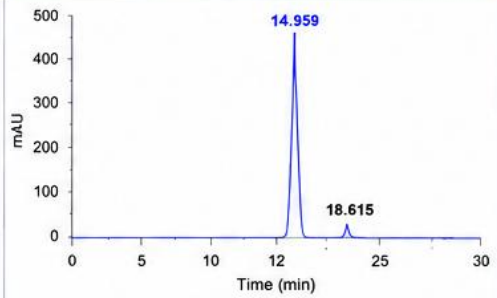
Peak No.	Retention Time (min)	Peak Name	Area (mAU-s)	Area (%)
1	14.968	5-Amino-1MQ	9,862.7	99.27
2	18.620	Impurity 1	73.6	0.73
Total	-	-	9,936.3	100.00

Day 60



Peak No.	Retention Time (min)	Peak Name	Area (mAU-s)	Area (%)
1	14.963	5-Amino-1MQ	9,848.7	99.20
2	18.623	Impurity 1	81.7	0.80
Total	-	-	9,930.4	100.00

Day 90

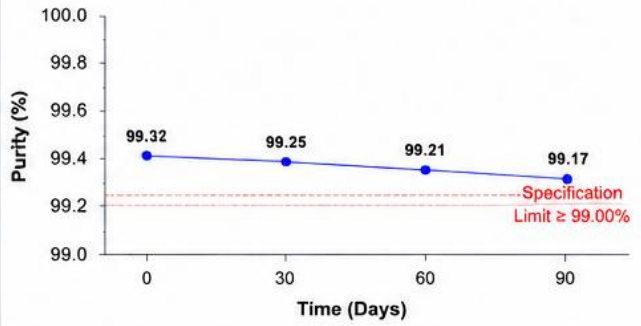


Peak No.	Retention Time (min)	Peak Name	Area (mAU-s)	Area (%)
1	14.959	5-Amino-1MQ	9,834.1	99.19
2	18.615	Impurity 1	87.3	0.81
Total	-	-	9,921.4	100.00

STABILITY DATA (2–8 °C)

Time Point	Assay (%)	Purity (%)	Total Impurities (%)	pH	Appearance
Day 0 (Initial)	99.58	99.32	0.42	7.15	Clear, Colorless
Day 30	99.51	99.25	0.49	7.17	Clear, Colorless
Day 60	99.47	99.21	0.53	7.16	Clear, Colorless
Day 90	99.43	99.17	0.57	7.15	Clear, Colorless

Purity Trend Over 90 Days (2–8 °C)



SYSTEM SUITABILITY (Day 0)

Parameter	Result	Acceptance Criteria
Retention Time (5-Amino-1MQ)	14.975 min	N/A
Theoretical Plates (N)	19,847	≥ 10,000
Tailing Factor (T)	1.07	≤ 2.0
Resolution (Rs, Imp 1)	6.20	≥ 1.5

CONCLUSION

Under refrigerated conditions (2–8 °C), the 5-Amino-1MQ sample maintains excellent chemical stability for 90 days. Purity remained above 99.17%, with minimal increase in impurities and no significant change in pH or appearance.