

CERTIFICATE OF ANALYSIS

Summary Report — Analytical Verification

PRODUCT NAME	TESAMORELIN	BATCH NUMBER	TS-260401
CAS NUMBER	218949-48-5	TESTING TYPE	Full In-House Analytical Verification
PURPOSE	Research Use Only (RUO)		

1. IDENTITY VERIFICATION

Test Parameter	Specification / Criteria	Result
Molecular Weight Confirmation Theoretical: 5135.86 Da	Measured: 5135.82 Da Criteria: 理论值 ± 1 Da	CONFORMS
HPLC Retention Time	Main peak retention time matches reference standard 主峰保留时间与对照品一致	CONFORMS

2. PURITY & IMPURITY PROFILE

Test Parameter	Specification	Result
HPLC Purity (Main Peak)	≥ 99.00%	99.11%
Total Impurities	≤ 1.0%	0.89%
Single Impurity	≤ 0.5%	0.35%

These values confirm a clean synthesis with low impurity levels.

3. PHYSICOCHEMICAL PROPERTIES

Parameter	Specification	Result
Water Content	≤ 5%	4.7%
Oligomers	≤ 0.5%	Not Detected (ND)
Sodium/Acetate Content	≤ 12%	6.1%
pH (5 mg/mL solution)	3.0 – 6.5	5.1

All physicochemical values fall within acceptable ranges.

4. RESIDUAL SOLVENTS

Solvent	Specification	Result
TFA (Trifluoroacetic Acid)	≤ 0.5%	Not Detected (ND)
DMF (Dimethylformamide)	≤ 880 ppm	Not Detected (ND)
MTBE (Methyl tert-butyl ether)	≤ 5000 ppm	Not Detected (ND)
Dichloromethane	≤ 600 ppm	Not Detected (ND)
Acetonitrile	≤ 410 ppm	1341 ppm *

* **Note on Residual Solvents:** Acetonitrile exceeds internal limits. Consequently, this batch is strictly designated for laboratory research use only.

5. ASSAY & PEPTIDE CONTENT

Test Parameter	Specification	Result
Assay	95 – 105%	98.2%
Peptide Content	≥ 80%	87.9%

Both values meet internal standards.

6. BIOLOGICAL SAFETY

Test Parameter	Specification	Result Reference	Status
Endotoxins	≤ 5 EU/mg	内毒素含量 conform	CONFORMS
Microbiological Limits	TAMC ≤ 10 ² cfu/g TYMC ≤ 10 ² cfu/g	微生物限度 conform	CONFORMS

7. Final Conclusion

Overall Result: CONFORMS TO SPECIFICATION WITH CAVEAT

This batch meets all internal analytical standards except for **acetonitrile**, which is explicitly noted and disclosed for full transparency.

8. STORAGE CONDITIONS

Store in an airtight container, protected from light, at **–20°C ± 5°C**.

— End of Report —

*This Certificate of Analysis is provided for informational and research purposes only.
All supplier-identifying information has been removed for privacy.*