

Certificate of Analysis

Product	Tesamorelin (Human Growth Hormone Releasing Factor Analog)	CAS No.:	218949-48-5
Product No.:	Tesamorelin	Molecular Formula	C ₁₅₂ H ₂₅₂ N ₄₄ O ₄₂
Sequence	H-Glu-His-Trp-Ser-Tyr-D-Ala-Leu-Arg-Pro-Arg-NH2 (Disulfide bridge: Cys2–Cys11)		
Batch No.	TESA-260601	Quantity	2.0 mg
Mfg. Date	May 26th, 2026	Retest Date	May 25th, 2028

[ITEMS]	[SPECIFICATIONS]	[RESULTS]
Appearance	White or almost white lyophilized powder	White lyophilized powder
Solubility	Freely soluble in water	Conforms
Solution clarity and color	Clear and colorless	Conforms
Specific optical rotation $[\alpha]_D^{20}$	-20.0° to -10.0° (anhydrous and sodium ion-free substance)	-15.8°
Identification by HPLC	The retention time of the principal peak of the test solution corresponds to that of the reference solution, as obtained in the Assay.	Conforms
Molecular weight	About 1686.9 Da	1686.1
Mass spectrum	1686.9±5.0	1686.4
pH	5.0~7.0	6.1
Water content (KF)	NMT 8.0%	2.6%
Peptide content (HPLC)	NLT 98.0%	99.35%
Purity (HPLC)	NLT 98.0%	99.21%
Related substances (HPLC)	Any individual impurity: NMT 1.0% Total impurities: NMT 2.0%	0.18% 0.61%
High molecular protein	NMT 0.5%	0.12%
Amino acid analysis	Glu: 1.0~2.0 His: 1.0~2.0 Trp: 1.0~2.0 Ser: 1.0~2.0 Tyr: 1.0~2.0 D-Ala: 0.8~1.5 Leu: 1.0~2.0 Arg: 2.0~4.0 Pro: 1.0~2.0	1.2 1.1 1.0 1.2 1.1 0.9 1.1 2.1 1.1
Disulfide bridge	Should be detected	Conforms



Residual solvent	Methylene chloride NMT 600ppm Acetonitrile NMT 410ppm Methyl tert-butyl ether NMT 5000 ppm DMF NMT 880ppm	N.D 38ppm N.D N.D
Bacterial endotoxins	NMT 10EU/mg	<3EU/mg
Microbial limits	TAMC NMT 100 cfu/g TYMC NMT 100 cfu/g E. Coli: Absent	<20 cfu/g <20 cfu/g Absent
Assay (C ₁₅₂ H ₂₅₂ N ₄₄ O ₄₂)	95.0%~105.0%(Calculated with reference to the anhydrous and sodium ion-free substance.)	99.18%
Storage	Keep in tight container, protect from light, store at a temperature of -20±5°C.	
Report	Li peng	Date 2026.06.03
Reviewer	Fang Hui Liao	Date 2026.06.03
Conclusion: This batch of product complies with Enterprise Standards		



It is only supplied as chemical product.
It is only for R&D use.

Testing Organization:
Shanghai High Purity Peptide Biotechnology Co., Ltd.
上海高纯肽生物科技有限公司