

Certificate of Analysis

Product	Semaglutide	CAS No. :	910463-68-2
Product No.:	SEMA-01	Molecular Formula	C ₁₈₇ H ₂₉₁ N ₄₅ O ₅₉
Sequence	H-Aib-His-Ala-Glu-Gly-Thr-Phe-Thr-Ser-Asp-Val-Ser-Ser-Tyr-Leu-Glu-Gly-Gln-Ala-Ala-Lys-Glu-Phe-Ile-Ala-Trp-Leu-Val-Lys-Gly-Arg-Gly-OH (Disulfide bond:Cys ⁶ -Cys ¹¹)		
Batch No.	SEMA-260601	Quantity	2.0g
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 and clear	Conforms
Solution clarity and color	Clear and colorless	Conforms
Identification (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
Identification (Mass Spectrometry)	The molecular weight of the principal peak corresponds to that of Semaglutide.	Conforms
Purity (HPLC)	NLT 98.0%	99.2%
Related substances (HPLC)	Any individual impurity: NMT 1.0% Total impurities: NMT 2.0%	0.45% 0.88%
Peptide content (by HPLC)	NLT 98.0%	99.1%
Water content (Karl Fischer)	NMT 5.0%	2.6%
Acetate (as CH ₃ COO ⁻)	NMT 10.0%	5.2%
Specific optical rotation [α] _D ²⁰	-40.0° to -30.0° (c=1, in water)	-34.6°
pH (1% aqueous solution)	6.5~7.5	7.0
Endotoxin	NMT 10 EU/mg	<3 EU/mg
Residual solvents	Complies with ICH Q3C	Conforms
Amino acid composition	Complies with theoretical composition of Semaglutide	Conforms
Disulfide bond (Cys ⁶ -Cys ¹¹)	Should be detected	Conforms
Oxidation (Met)	NMT 2.0%	0.6%
Pyroglutamate (N-terminal)	NMT 3.0%	0.8%
Aggregate content (SEC-HPLC)	High molecular weight: NMT 2.0% Low molecular weight: NMT 2.0%	0.7% 0.6%
Particle size	NMT 100 mesh (≤150 μm)	Conforms
Microbial limits	TAMC NMT 100 cfu/g TYMC NMT 100 cfu/g E. Coli: Absent Salmonella: Absent	<10 cfu/g <10 cfu/g Absent Absent
Storage	Store in a cool, dry place, protected from light. Store at -20±5°C.	Conforms

Residual solvent	Methanol NMT 3000ppm Ethanol NMT 5000ppm Acetone NMT 5000ppm Isopropanol NMT 5000ppm Hexane NMT 290ppm	N.D N.D N.D N.D N.D
Bacterial endotoxins	NMT 10EU/mg	<3EU/mg
Stability	Stable under recommended storage conditions	Conforms
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