



大连汉德姆精细化学品有限公司

DALIAN HANDOM CHEMICALS CO.,LTD.

Certificate of Analysis

Product Name: Retatrutide

CAS No.: 2381089-83-2

Molecular Formula: C₂₂₁H₃₄₂N₄₆O₆₈

Batch No.: HDC20241218

Manufacturing Date: Dec 18th, 2024

Retest Date: Dec 17th, 2026

Quantity: 1808.7g

Report Date: Dec 19th, 2024

Sequence: Tyr-{Aib}-Gln-Gly-Thr-Phe-Thr-Ser-Asp-Tyr-Ser-Ile- $\{\alpha$ -Me-Leu}-Leu-Asp-Lys-{diacid-C20-gamma-Glu-(AEEA)-Lys}-Ala-Gln-{Aib}-Ala-Phe-Ile-Glu-Tyr-Leu-Leu-Glu-Gly-Gly-Pro-Ser-Ser-Gly-Ala-Pro-Pro-Pro-Ser-NH₂

Test Items		Specifications	Test Results
Appearance		White or off-white powder	White powder
Solubility		Can be dissolved to 5mg/ml in pure water	Conforms
Molecular Ion Mass		4731.42 ± 1	Conforms
pH Value		7.0 ~ 9.0 (C=5mg/mL)	7.63
Water Content (K.F)		Not more than 8.0%	1.88%
Purity (HPLC)		Not less than 98.0%	99.59%
Related Substances (HPLC)	The largest individual impurity	Not more than 1.0%	0.19%
	The total impurities	Not more than 2.0%	0.41%
Residual Solvents (GC)	Methylene Chloride	Not more than 600 ppm	Not detected
	Acetonitrile	Not more than 410 ppm	212 ppm
	Methanol	Not more than 3000 ppm	Not detected
	N,N-Dimethylformamide	Not more than 880 ppm	Not detected
	Isopropyl Ether	Not more than 5000 ppm	Not detected
Acid Group Ions (HPLC)	TFA	Not more than 0.1%	Not detected
	PO ₄ ³⁻	Not more than 0.1%	Not detected
	Cl ⁻	Not more than 0.1%	Not detected
	HAC	Not more than 0.1%	Not detected



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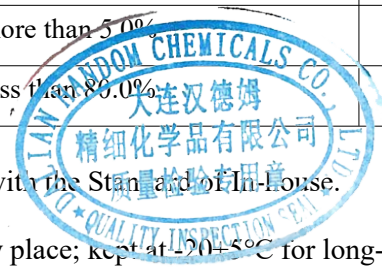
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Bacterial Endotoxins	Not more than 10 EU/mg	Conforms	
Microbial Limits	Total Aerobic Microbial Count	Not more than 1000 CFU/g	Conforms
	Total Yeast and Mold Count	Not more than 100 CFU/g	Conforms
	Escherichia coli	Negative	Conforms
	Salmonella	Negative	Conforms
	Pseudomonas aeruginosa	Negative	Conforms
	Staphylococcus aureus	Negative	Conforms
Sodium Ion	Not more than 5.00%	1.4%	
Peptide Content (Mass Balance)	Not less than 86.00%	96.3%	



Conclusion: The testing results of this batch are complied with the Standard of In-house.

Storage Conditions: Stored in tight containers in a cool dry place; kept at -20+5°C for long-term storage.