



# Certificate of Analysis

**Product Name:** Retatrutide**Formula:** C<sub>221</sub>H<sub>342</sub>N<sub>46</sub>O<sub>68</sub>**Lot No.:** 25091602**Salt Type:** Na<sup>+</sup>**Report Date:** 2025-09-16**Retest Date:** 2027-09-15**Cas:** 2381089-83-2**Quantity:** 1164g**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-Ser-NH<sub>2</sub>

Tests	Specification	Results
Appearance	White powder	Conforms
Solubility	Soluble in water $\geq 50$ mg/ml	Conforms
Related Substances(HPLC)	Maximum single impurity $\leq 0.5\%$ Total impurities $\leq 1\%$ .	0.33% 0.75%
Purity	$\geq 99\%$	99.25%
Water Content	$\leq 10\%$	5.3%
Acetic acid	$\leq 2\%$	ND
Sodium ion	$\leq 3\%$	1.6%
Trifluoroacetic acid	$\leq 5000$ ppm	ND
Residual solvents	Methanol: $\leq 300$ ppm Isopropanol: $\leq 500$ ppm Acetonitrile: $\leq 410$ ppm Methylene chloride: $\leq 600$ ppm N,N-Dimethylformamide: $\leq 800$ ppm	Methanol: N.D Isopropanol: N.D Acetonitrile: 99ppm Methylene chloride: N.D N,N-Dimethylformamide: N.D
Assay	95.0%~105.0%	99.5%
Peptide content	$\geq 90\%$	92.4%
pH	6.0-9.0	7.3
Bacterial endotoxin	$< 5$ EU/mg	Conforms
Mass Spectrum	4731.33 $\pm$ 1	Conforms

**Storage:** In the air tight container, protected from light at temperature -20°C**Notes:** Not for human use, for research purpose only.