

Certificate of Analysis

Lot number	XR24050601-1-1
Product	Retatrutide 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-NH ₂
Manufacturing date	Jun 29, 2024
Retest date	Jun 28, 2024
CAS number	2381089-83-2
Molecular formula	C ₂₂₁ H ₃₄₂ N ₄₆ O ₆₈
Molecular mass	4731.33

Tests	Specifications	Results
Appearance	white or almost white powder	white powder
Identification (MS)	4731.33 \pm 1.0	conforms
Solubility	soluble in water	conforms
Water content (karl fischer)	\leq 8.0%	4.66%
Sodium ion	\leq 5.0%	1.45%
Acetic acid (HPLC)	\leq 0.5%	0.05%
Trifluoroacetic acid	\leq 0.5%	not detected
Peptide purity (HPLC)	\geq 98.0%	99.57%
Assay (C₂₂₁H₃₄₂N₄₆O₆₈)	\geq 80.0%	93.37%
Total impurities	\leq 2.0%	0.43%
Largest single impurity	\leq 1.0%	0.18%
pH	6.0-8.5	6.83
Bacterial endotoxins (kinetic turbidimetry)	NMT 10 EU/mg	conforms
Total aerobic microbial count	NMT 100 CFU/g	conforms
Total yeasts and molds count	NMT 100 CFU/g	conforms

Analysis date: Jul 15, 2024

Certificate of AnalysisLot number **XR24050601-1-1**