

CERTIFICATE OF ANALYSIS

Product Name	Retatrutide / LY3437943 (Cat.# 319206, >99% purity)
Lot No.	6009-0725-01
Sequence	Tyr-{Aib}-Gln-Gly-Thr-Phe-Thr-Ser-Asp-Tyr-Ser-Ile- α -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 (Sodium salt)
Dissolution condition	100% H ₂ O
Length	39AA
Modification	sodium salt
Molecular Weight (MW)	4731.33
Storage	-20°C

	Specifications	Results
Appearance	White to off-white lyophilized powder	Conforms
MW by MS	4731.33 $\pm$ 1Da	4731.25Da
Dissolution	Tested: Water PBS DMSO	Water: soluble, 100mg/ml PBS: soluble, 100mg/ml DMSO: soluble, 100mg/ml
pH value	7.0-8.0	7.4
TFA	$\leq$ 0.5%	0%,undetectable
Acetate	$\leq$ 5.0%	0%,undetectable
Sodium salt	$\leq$ 5.0%	1.07%
Purity	$\geq$ 99.0%	99.434%
Impurity	Single Impurity $\leq$ 1.0%	0.3%
	Total Impurity $\leq$ 2.0%	0.4%
Polymer	$\leq$ 0.5%	0.08%
Net peptide content (NPC)	$\geq$ 85.0%	96.6%
Water	$\leq$ 8.0%	4.5%

Certified by:



Quality Assurance Department

Dec/22/2025



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Lot No. 6009-0725-01

	Specifications	Results
Methanol	≤0.3%	0.02%
Acetonitrile	≤0.041%	0.007%
Dichloromethane	≤0.06%	0%,undetectable
Methyl-t-Butyl Ether	≤0.5%	0%,undetectable
N,N-Dimethylformamide	≤0.088%	0%,undetectable
Aspartic acid	1.6~2.4	1.8
Threonine	1.6~2.4	1.9
Serine	4.0~6.0	4.1
Glutamic acid	4.0~6.0	4.6
Glycine	3.2~4.8	3.5
Alanine	2.4~3.6	2.7
Isoleucine	1.6~2.4	2.2
Leucine	2.4~3.6	2.8
Tyrosine	2.4~3.6	2.7
Phenylalanine	1.6~2.4	1.8
Lysine	1.6~2.4	1.9
Proline	3.2~4.8	3.5
Endotoxin	≤10EU/mg	Conforms
Microorganism limit	Aerobic bacteria ≤10 ³ cfu/g	Conforms
	Moulds and yeasts ≤10 ³ cfu/g	Conforms

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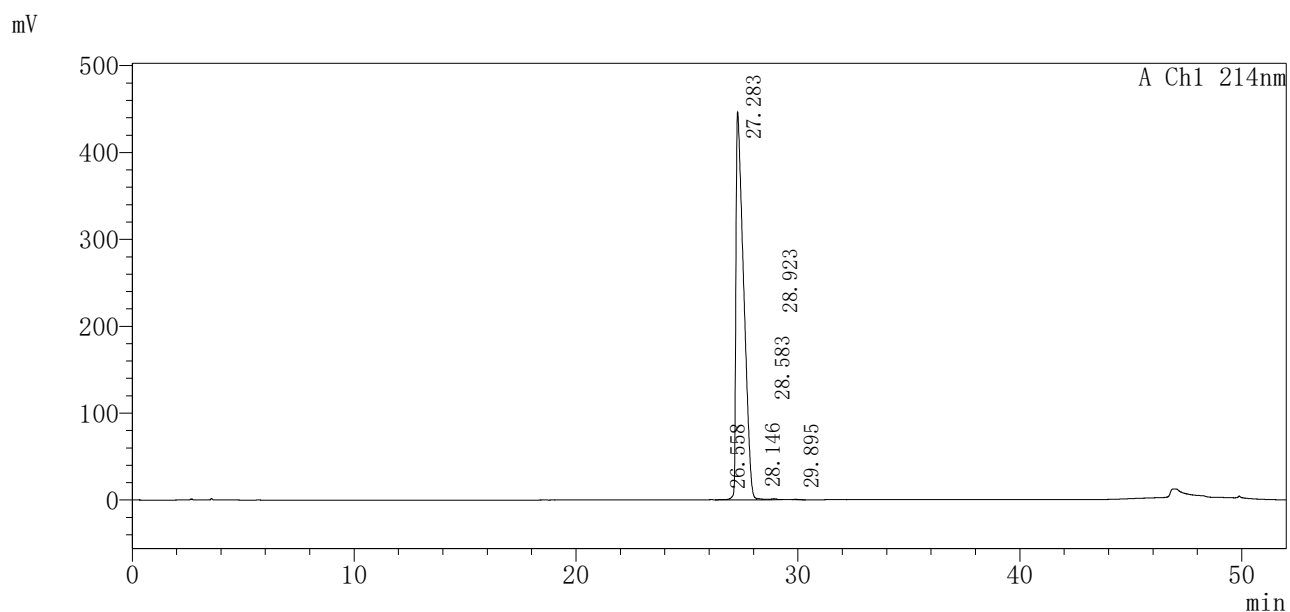
Dec/22/2025



Single Injection Report

Sequence Name: : Retatrutide
 Sample name: : 6009-0725-01
 Sample ID: : 6009-0725-01
 Data file name: : 6009-0725-01.lcd
 Method File Name: : TZP-52min.lcm
 Batch file name: : 250918-01.lcb
 Sample bottle number : 1-6
 Injection volume: : 10 uL
 Date of analysis: : 2025/12/21 20:21:31
 Date of processing : 2025/12/21 20:49:12

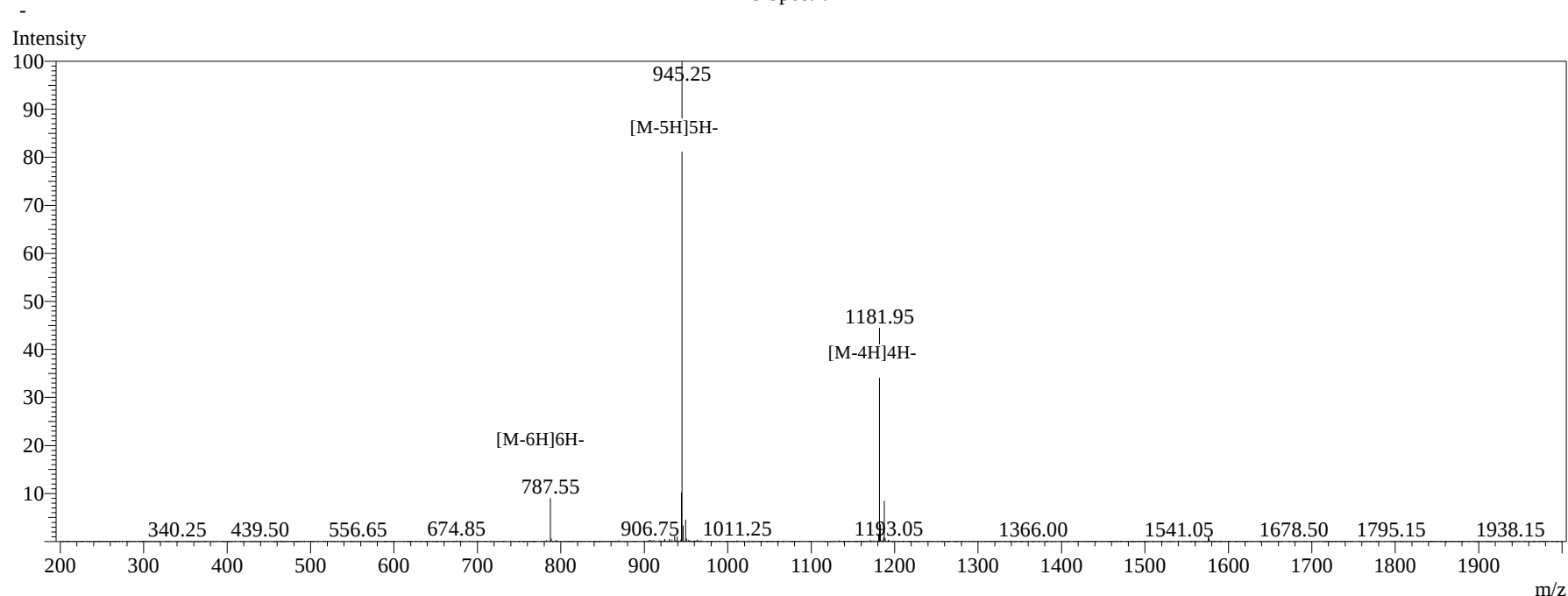
VWD1A,Wavelength=214 nm



Signal:VWD1A,Wavelength=214 nm

Peak #	RT [min]	Area	Height	Area%	Plate No. (USP)	Tailing factor	Resolution(USP)
1	26.558	6281	429	0.058	25670	--	--
2	27.283	10829082	446492	99.434	23369	2.6	1.1
3	28.146	20515	1474	0.188	--	--	--
4	28.583	8773	649	0.081	3829	--	--
5	28.923	19583	1134	0.180	53838	--	0.3
6	29.895	6487	452	0.060	88669	--	2.2
总计		10890721	450630	100.000			

MS Spectrum



Sample Information

Dissolution method	:15%ACN+85%H ₂ O	Interface	:ESI	Prerod Bias	:+4.5kv
Date Acquired	:2025/12/22 15:51:41	Nebulizing Gas Flow	:1.5L0/min	Detector	:-0.2kv
Injection Volume	:0.2ul	CDL Temp	:250°C	T.Flow	:0.2ml/min
Block Temp	:200	CDL Volt	:0v	B.conc	:50%H ₂ O/50%MEOH
Order ID	:6009-0725-01				
Name	:Retatrutide				
Sequence	:Tyr-{Aib}-Gln-Gly-Thr-Phe-Thr-Ser-Asp-Tyr-Ser-Ile- α -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				
Lot.No	:6009-0725-01				
Theoretical	:4731.33				
Observed	:4731.25				

Instructions for dissolving Retatrutide (LY3437943)

The Retatrutide is soluble in 100% H₂O or 1xPBS. The suggested concentration is 5.0 mg/ml.

The steps are as below:

1. Adding 1.0 ml ultrapure water to the 2.0 ml tube of Retatrutide;
2. Wait about 1 minute at room temperature until the solution is clear, which indicates the peptide is fully dissolved;
3. Use a sterile 0.22 μ m membrane filter for a particle-free and bacteria-free Retatrutide solution.
For example, Catalog# SLGPR33RB, Millipore Millex-GP Syringe Filter Unit, 0.22 μ m, polyethersulfone, 33 mm, gamma sterilized.

The detailed application information of Retatrutide can be found at:

<https://pubmed.ncbi.nlm.nih.gov/37366315/>