


**CERTIFICATE OF ANALYSIS**

Product Name	Retatrutide / LY3437943 (Cat.# 319206, >99% purity)
Lot No.	6009-240722-01
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-NH <sub>2</sub> (Sodium salt)
Dissolution condition	100% H <sub>2</sub> O
Length	39AA
Modification	sodium salt
Molecular Weight (MW)	4731.33
Storage	-20°C

	Specifications	Results
<b>Appearance</b>	White to off-white lyophilized powder	Conforms
<b>MW by MS</b>	4731.33±2Da	4731.20Da
<b>Dissolution</b>	Tested: Water PBS DMSO	Water: soluble, 100mg/ml PBS: soluble, 100mg/ml DMSO: soluble, 100mg/ml
<b>pH value</b>	6.0-8.0	7.4
<b>TFA</b>	≤0.5%	0%, undetectable
Acetate	≤5.0%	0%, undetectable
<b>Sodium salt</b>	≤5.0%	1.22%
<b>Purity</b>	≥98.0%	99.70%
<b>Impurity</b>	Single Impurity ≤1.0%	0.2%
	Total Impurity ≤2.0%	0.3%
<b>Polymer</b>	≤5.0%	0.2%
<b>Net peptide content (NPC)</b>	≥80.0%	93.1%
<b>Water</b>	≤10.0%	3.7%

Certified by:



Quality Assurance Department

Oct/26/2024




## CERTIFICATE OF ANALYSIS

Product Name Retatrutide / LY3437943 (Cat.# 319206, >99% purity)  
Lot No. 6009-240722-01

	Specifications	Results
Methanol	≤0.3%	0.05%
Acetonitrile	≤0.041%	0.03%
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	2.0
Threonine	1.6~2.4	2.0
Serine	4.0~6.0	4.5
Glutamic acid	4.0~6.0	5.0
Glycine	3.2~4.8	4.0
Alanine	2.4~3.6	2.8
Isoleucine	1.6~2.4	2.4
Leucine	2.4~3.6	3.0
Tyrosine	2.4~3.6	3.0
Phenylalanine	1.6~2.4	2.0
Lysine	1.6~2.4	2.0
Proline	3.2~4.8	4.0
Endotoxin	≤10EU/mg	Conforms
Microorganism limit	Aerobic bacteria ≤10 <sup>3</sup> cfu/g	Conforms
	Moulds and yeasts ≤10 <sup>3</sup> cfu/g	Conforms

Certified by:



Quality Assurance Department

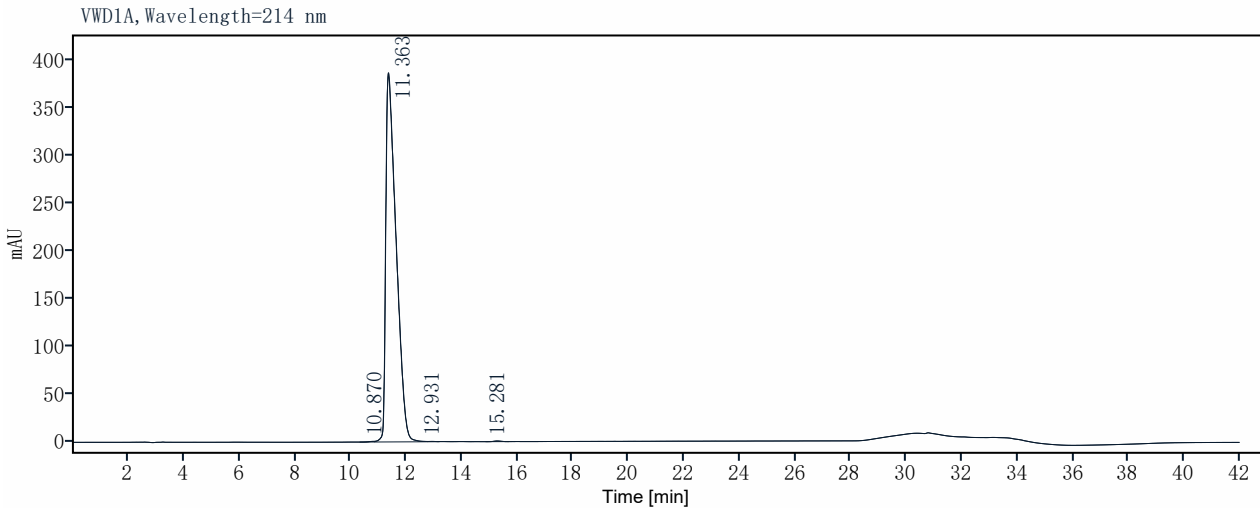
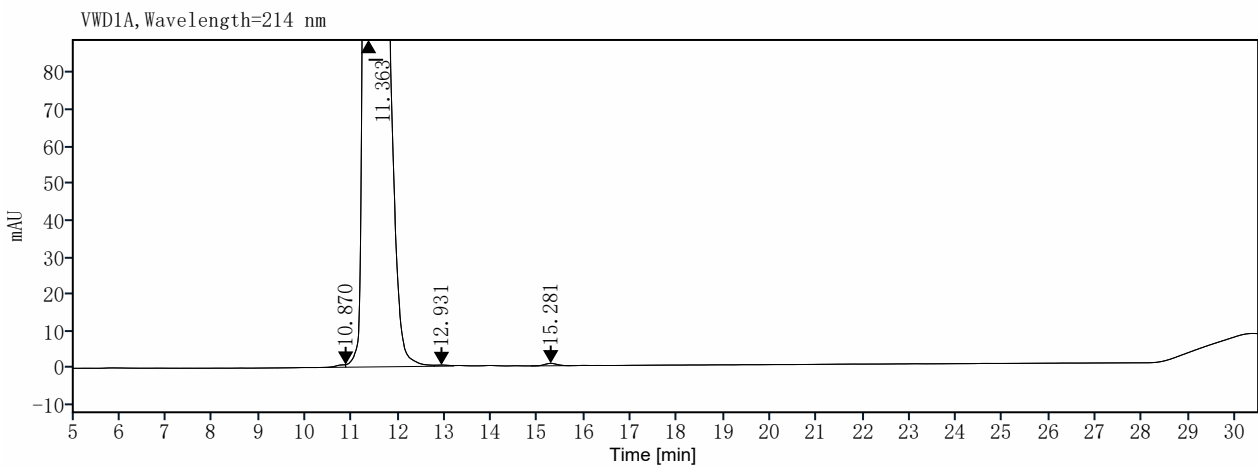
Oct/26/2024



# Single Injection Report



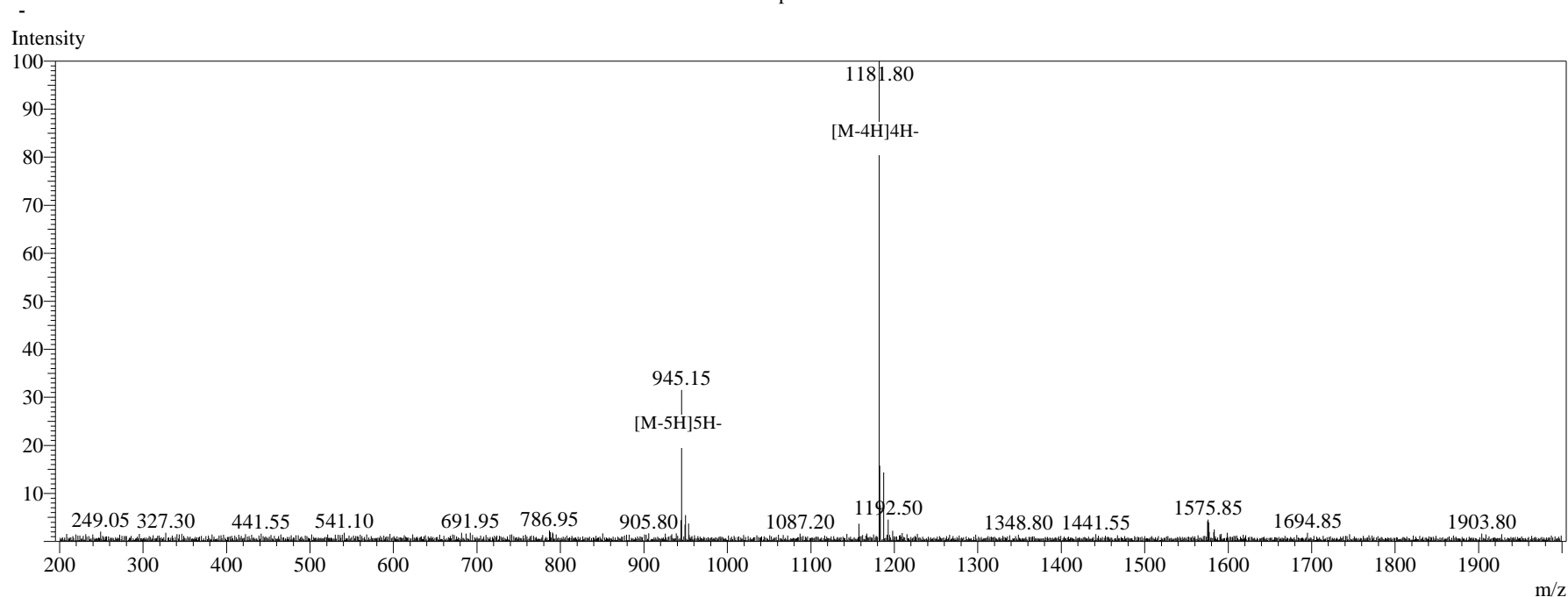
<b>Sequence Name:</b>	Retatrutide	<b>Project Name:</b>	6004
<b>Sample name:</b>	6009-240722-01	<b>Operator:</b>	liuyu
<b>Instrument:</b>	QC804008	<b>Injection date:</b>	2024-10-24 15:38:40+08:00
<b>Inj. volume:</b>	10.000	<b>Location:</b>	P1-C2
<b>Acq. method:</b>	20-40-50-30min.amx	<b>Type:</b>	Sample
<b>Processing method:</b>	GC_LC Area%_DefaultMethod.pmx	<b>Manually modified:</b>	Manual Integration



Signal: VWD1A, Wavelength=214 nm

	RT [min]	Area	Height	Area%	Resolution	Tailing factor	Plate_number
1	10.87	8.86	0.7	0.09		0.5	
2	11.36	9970.01	385.6	99.73		2.2	4035
3	12.93	6.23	0.3	0.06	1.6	1.4	1569
4	15.28	11.90	0.7	0.12	2.6	1.3	15798
	<b>Total</b>	9996.99					

## MS Spectrum



## Sample Information

Dissolution method	:H2O	Interface	:ESI	Prerod Bias	:+4.5kv
Date Acquired	:2024/10/24 14:10:39	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%H2O/50%MEOH
Order ID	:6009				
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-NH2				
Lot.No	:6009-240722-01				
Theoretical	:4731.4				
Observed	:4731.2				