

CERTIFICATE OF ANALYSIS

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|-----------------------|--|
| Product Name | Retatrutide / LY3437943 (Cat.# 319206, >99% purity) |
| Lot No. | MTFA31651-0729 |
| 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 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±2Da | 4731.70Da |
| Dissolution | Tested: Water PBS DMSO | Water: soluble, 100mg/ml PBS: soluble, 100mg/ml DMSO: soluble, 100mg/ml |
| pH value | 6.0-8.0 | 7.5 |
| TFA | ≤0.5% | 0%, undetectable |
| Acetate | ≤5.0% | 0%, undetectable |
| Sodium salt | ≤5.0% | 1.20% |
| Purity | ≥98.0% | 99.70% |
| Impurity | Single Impurity ≤1.0% | 0.2% |
| | Total Impurity ≤2.0% | 0.3% |
| Polymer | ≤5.0% | 0.1% |
| Net peptide content (NPC) | ≥80.0% | 93.0% |
| Water | ≤10.0% | 4.9% |

Certified by:



Quality Assurance Department

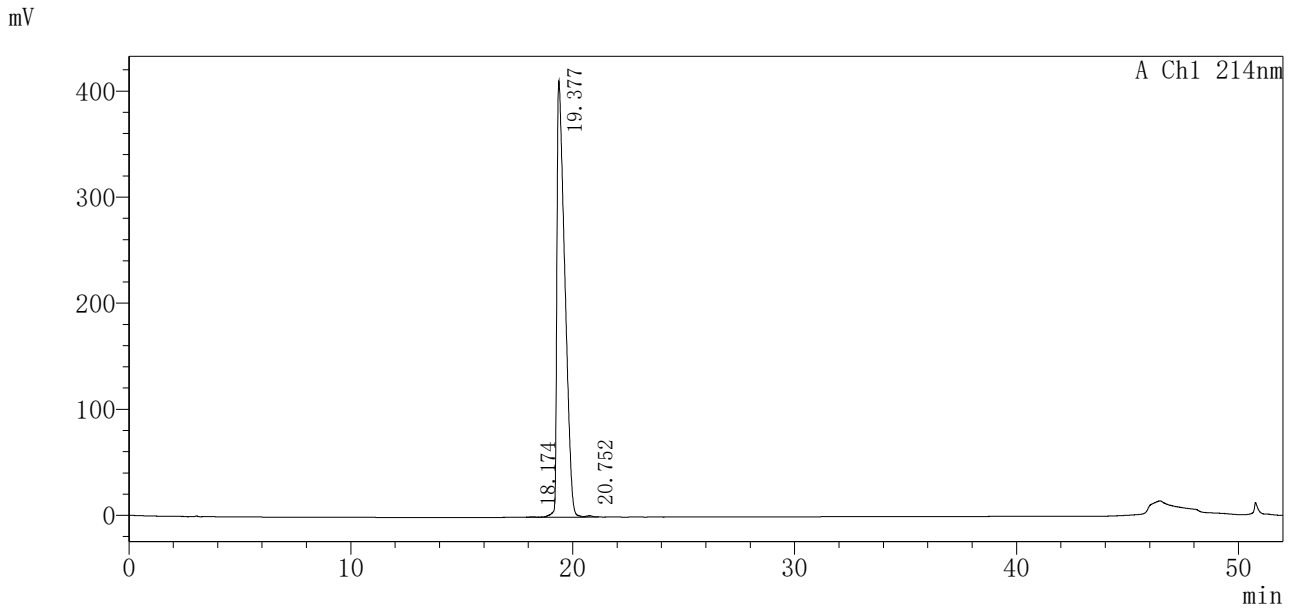
Jul/31/2024



Order ID :Cat.# 319206
 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 :MTFA31651-0729
 Pump A :0.1%Trifluoroacetic in 100% water
 Pump B :0.1%Trifluoroacetic in 100% acetonitrile
 Total Flow :1ml/min
 Wavelength :214nm
 Analytical column type :Phenomenex Luna® 5 μ m C18 (2) (4.6*250mm*5 μ m)
 Dissolution method :50%ACN+50%H2O
 Inj. Volume : 20ul

| Time | Module | Action | Value |
|-------|------------|--------|-------|
| 0.01 | Pumps | B.Conc | 45 |
| 20.00 | Pumps | B.Conc | 65 |
| 33.00 | Pumps | B.Conc | 100 |
| 38.00 | Pumps | B.Conc | 100 |
| 40.00 | Pumps | B.Conc | 45 |
| 50.00 | Controller | Stop | |

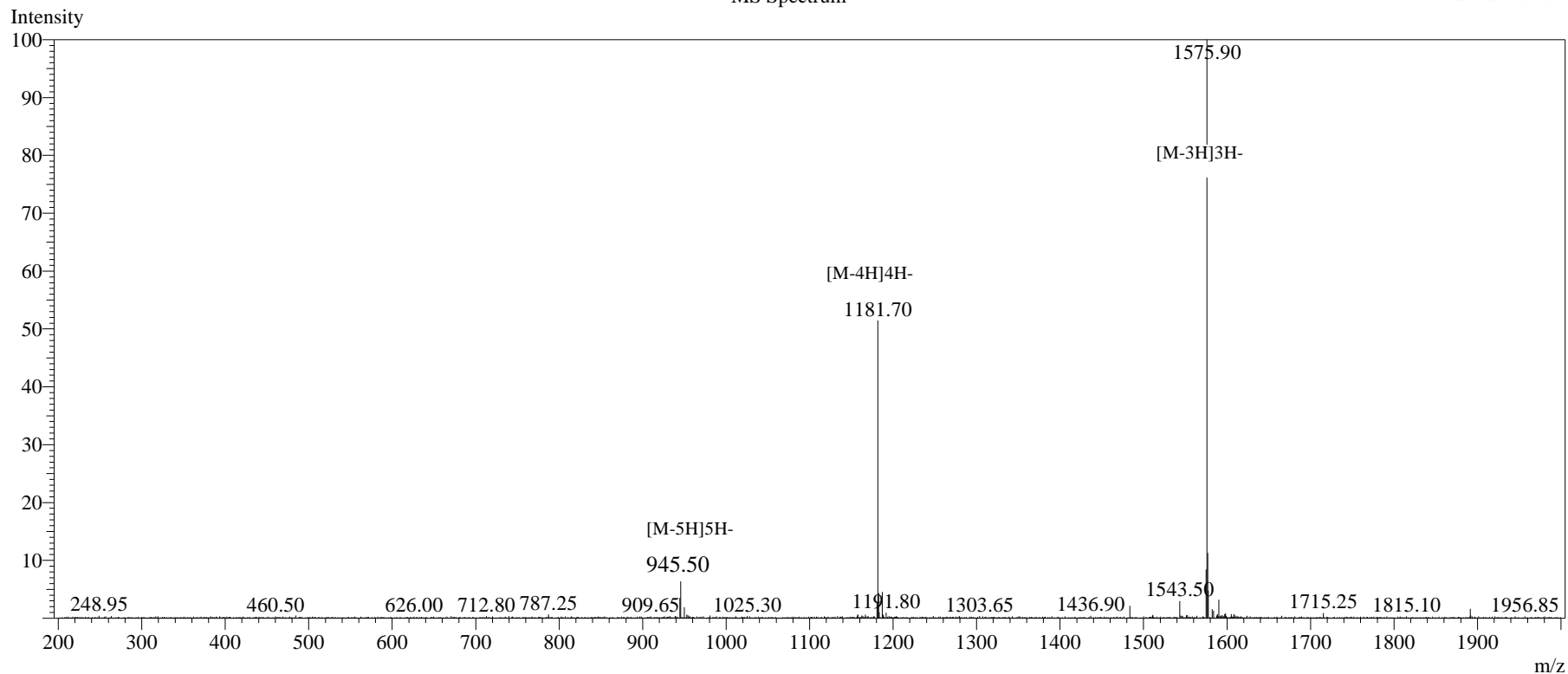
Chromatogram



Peak Table

| | | | | | | | |
|----|--------|----------|--------|---------|-------|-----|-----|
| 1 | 18.174 | 7583 | 452 | 0.074 | 25607 | -- | -- |
| 2 | 19.377 | 10267333 | 411480 | 99.686 | 11779 | 2.1 | 2.3 |
| 3 | 20.752 | 24714 | 1221 | 0.240 | 20098 | 2.1 | -- |
| 总计 | | 10299630 | 413153 | 100.000 | | | |

MS Spectrum



Sample Information

| | | | | | |
|--------------------|-------------------------------|---------------------|------------|-------------|--------------------------------|
| Dissolution method | :15% ACN+85% H ₂ O | Interface | :ESI | Prerod Bias | :+4.5kv |
| Date Acquired | :2024/07/30 09:57:38 | Nebulizing Gas Flow | :1.50L/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 | :MTFA31651 |
| Name | :Retatrutide |
| Sequence | :Tyr-{Aib}-Gln-Gly-Thr-Phe-Thr-Ser-Asp-Tyr-Ser-Ile- $\{\alpha$ -Me-Leu $\}$ -Leu-Asp-Lys- $\{\text{diacid-C20-gamma-Glu-(AEEA)-Lys}\}$ -Ala-Gln- $\{\text{Aib}\}$ -Ala-Phe-Ile-Glu-Tyr-Leu-Leu-Glu-Gly-Gly-Pro-Ser-Ser-Gly-Ala-Pro-Pro-Pro-Ser-NH ₂ |
| Lot.No | :MTFA31651-0729 |
| Theoretical | :4731.33 |
| Observed | :4730.70 |