

CERTIFICATE OF ANALYSIS

| | |
|------------------------------|--|
| Product Name | HPA3NT3-A2 peptide, Cat.# 318933 (TFA removed) |
| Lot No. | MTFA30119-3-0504 |
| Sequence | AKRLKKLAKKIWKWK-NH2 |
| Dissolution condition | 100%H2O |
| Length | 15AA |
| Modification | acetate salt |
| Molecular Weight (MW) | 1924.48 |
| Storage | -20°C |

| Test Items | Specifications | Results |
|----------------------------|---------------------------------------|----------------|
| MW by MS | 1923.84 | Conforms |
| Purity by HPLC | >95% | 96.001% |
| Peptide Content | N/A | N/A |
| Moisture content | N/A | N/A |
| Acetic acid content | N/A | N/A |
| Appearance | White to off-white lyophilized powder | Conforms |
| Quantity | 20mg | 5.0mg*4 |

NovoPro Bioscience Inc. (hereafter NovoPro) warrants material of said quality at the time of sale. It is the sole responsibility of the customers to determine the adequacy of all materials for any intended or specific purpose or use. NovoPro's sole obligation is to replace the material up to the extent of the purchase price. This warranty applies only to products in original packaging and does not apply to a product which has been tampered with or altered in any way in or which has been misused or damaged by accident or negligence. All claims must be received writing (by fax or email) within 30 days from date when product arrive at the destination city and failure to do so shall constitute a waiver by customers for any and all such claims.

Certified by:



Quality Assurance Department

May/24/2023

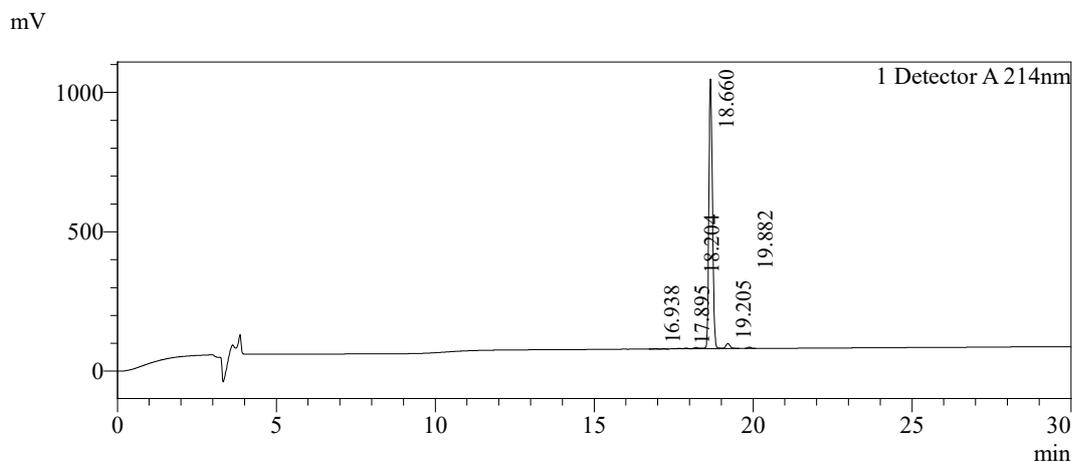


Sample Information

Order ID :MTFA30119-3
 Name :HPA3NT3-A2 peptide
 Sequence :AKRLKKLAKKIWKWK-NH2(Acetate Salt)
 Lot. No :MTFA30119-3-0504
 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 :Shim-pack GIST C18(4.6*250mm*5um)
 Dissolution method :100%H2O

| Inj. Volume | Time | Module | Action | Value |
|-------------|-------|------------|--------|-------|
| | 0.01 | Pumps | B.Conc | 15 |
| | 30.00 | Pumps | B.Conc | 45 |
| | 33.00 | Pumps | B.Conc | 100 |
| | 38.00 | Pumps | B.Conc | 100 |
| | 40.00 | Pumps | B.Conc | 15 |
| | 50.00 | Controller | Stop | |

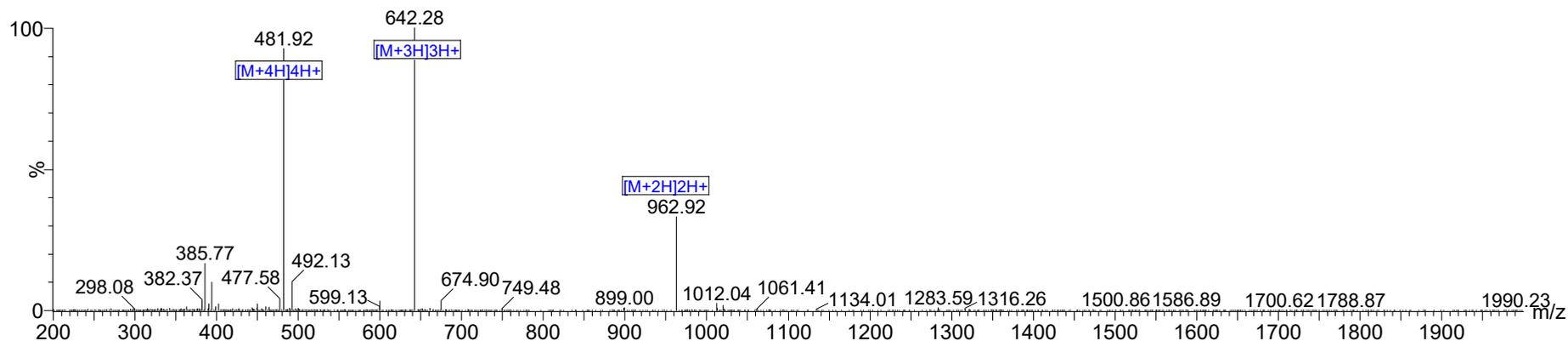
Chromatogram



Peak Table

| Detector A 214nm | | | | |
|------------------|-----------|---------|--------|---------|
| Peak# | Ret. Time | Area | Height | Area% |
| 1 | 16.938 | 10086 | 800 | 0.128 |
| 2 | 17.895 | 30860 | 2559 | 0.392 |
| 3 | 18.204 | 54897 | 4090 | 0.698 |
| 4 | 18.660 | 7555203 | 967163 | 96.001 |
| 5 | 19.205 | 185756 | 17916 | 2.360 |
| 6 | 19.882 | 33103 | 4632 | 0.421 |
| Total | | 7869906 | 997160 | 100.000 |

MS Spectrum

 Positive
Intensity


| | | | | | |
|--------------------|--------------------|---------------------|------------|-------------|-----------------|
| Dissolution method | :15%ACN+85%H2O | Interface | :ESI | Prerod Bias | :+4.5kv |
| Date Acquired | :5/17/2023 4:24:43 | Nebulizing Gas Flow | :1.50L/min | Detector | :-0.2kv |
| Injection Volume | :0.2ul | CDL Temp | :250C | T.Flow | :0.2ml/min |
| Block Temp | :200 | CDL Volt | :0v | B.conc | :50%H2O/50%MEOH |

| | |
|-------------|-------------------------------------|
| Order ID | : MTF30119-3 |
| Name | : HPA3NT3-A2 peptide |
| Sequence | : AKRLKKLAKKIWKWK-NH2(Acetate Salt) |
| Lot.No | : MTF30119-3-0504 |
| Theoretical | : 1924.48 |
| Observed | : 1923.84 |