

CERTIFICATE OF ANALYSIS

Product Name	β-Endorphin 1-31 peptide, Cat.#: 307123 (TFA removed)
Lot No.	MTFA31168-0326
Sequence	YGGFMTSEKSQTPLVTLFKNAIIKNAHKKGQ (Acetate Salt)
Dissolution condition	100%H2O
Length	31AA
Modification	acetate salt
Molecular Weight (MW)	3437.99
Storage	-20°C

Test Items	Specifications	Results
MW by MS	3438.50	Conforms
Purity by HPLC	>95%	96.997%
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

Apr/25/2024

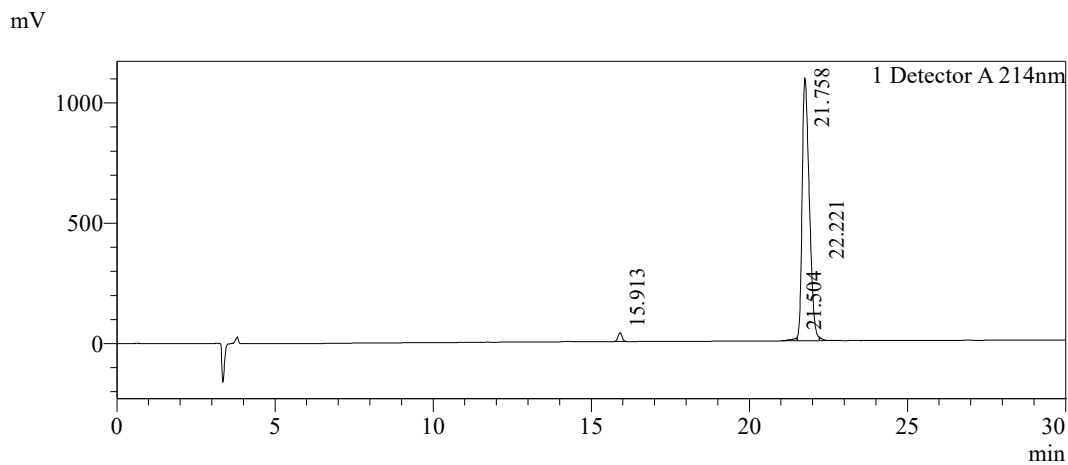


Sample Information

Order ID :MTFA31168
 Name :β-Endorphin 1-31
 Sequence :YGGFMTSEKSQLVTLFKNAIIKNAHKKKGQ(Acetate Salt)
 Lot. No :MTFA31168-0326
 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 μm C18 (2) (4.6*250mm*5 μm)
 Dissolution method :100%H2O
 Inj. Volume : 30ul

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	

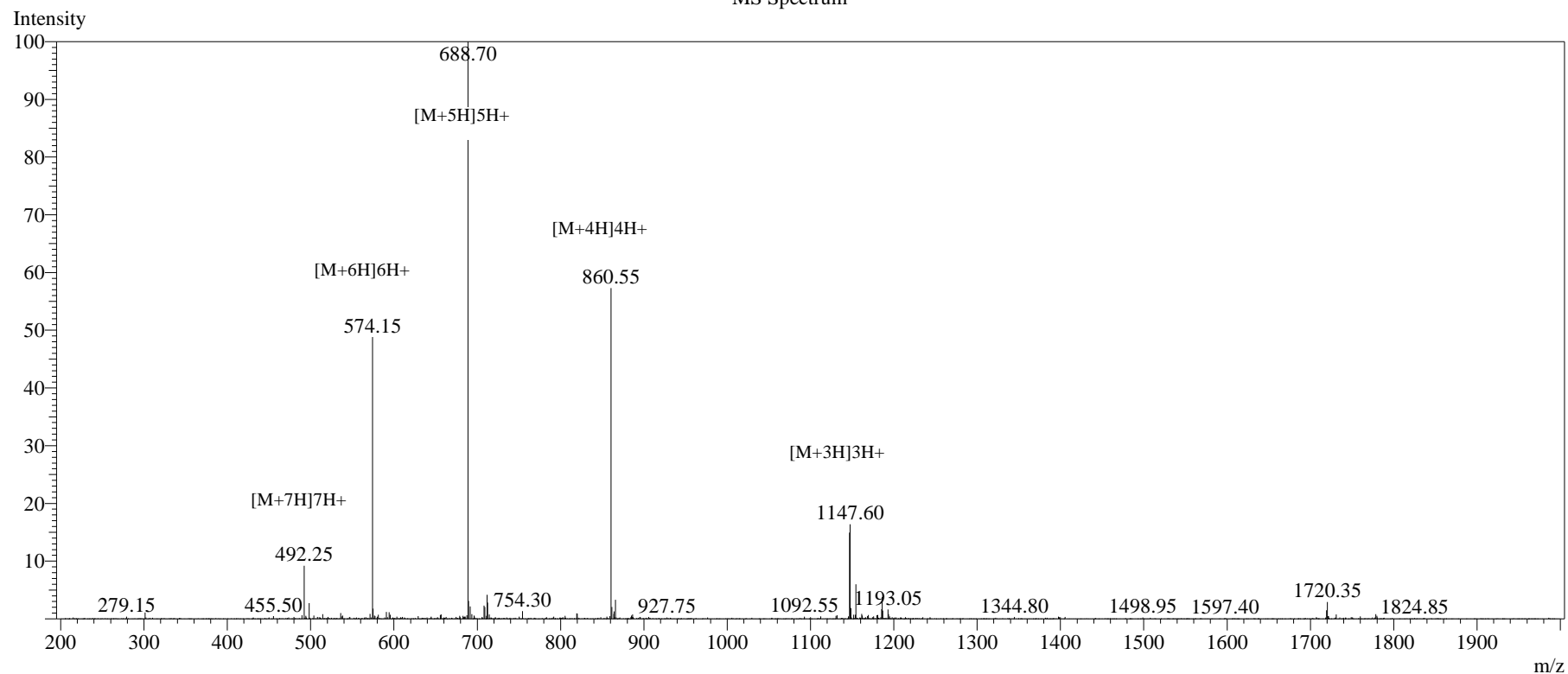
Chromatogram



Peak Table

Detector A 214nm				
Peak#	Ret. Time	Area	Height	Area%
1	15.913	317923	36090	1.794
2	21.504	131726	12309	0.743
3	21.758	17191676	1090304	96.997
4	22.221	82624	13927	0.466
Total		17723949	1152630	100.000

MS Spectrum



Sample Information

Dissolution method	:15% ACN+85% H ₂ O	Interface	:ESI	Prerod Bias	:+4.5kv
Date Acquired	:2024/04/16 14:37:19	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	:MTFA31168
Name	:β-Endorphin 1-31
Sequence	:YGGFMTSEKSQLVTLFKNAIIKNAHKKGQ (Acetate Salt)
Lot.No	:MTFA31168-0326
Theoretical	:3437.99
Observed	:3438.50