

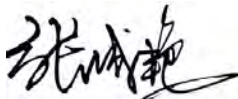
## CERTIFICATE OF ANALYSIS

<b>Product Name</b>	beta-Casomorphin-5 peptide, Cat.#: 303337
<b>Lot No.</b>	MTFA30366-1-0810
<b>Sequence</b>	YPFVE
<b>Dissolution condition</b>	100%H2O
<b>Length</b>	5AA
<b>Modification</b>	N/A
<b>Molecular Weight (MW)</b>	653.73
<b>Storage</b>	-20°C

<b>Test Items</b>	<b>Specifications</b>	<b>Results</b>
<b>MW by MS</b>	953.12	Conforms
<b>Purity by HPLC</b>	>95%	95.504%
<b>Peptide Content</b>	N/A	N/A
<b>Moisture content</b>	N/A	N/A
<b>Acetic acid content</b>	N/A	N/A
<b>Appearance</b>	White to off-white lyophilized powder	Conforms
<b>Quantity</b>	40mg	5.0mg*8

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

Aug/16/2023

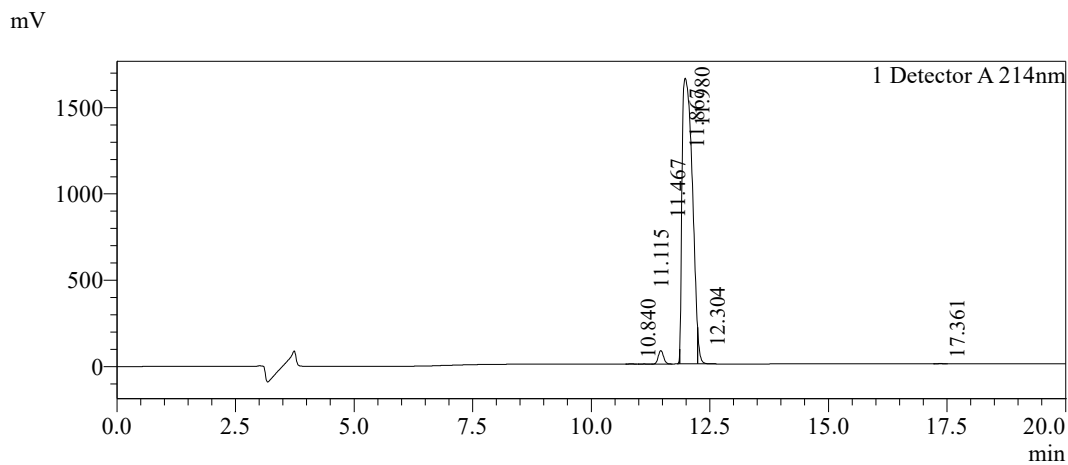


Sample Information

Order ID :MTFA30366-1  
 Name :beta-Casomorphin-5 peptide  
 Sequence :YPFVE  
 Lot. No :MTFA30366-1-0810  
 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 : 15ul

Time	Module	Action	Value
0.01	Pumps	B.Conc	20
20.00	Pumps	B.Conc	40
33.00	Pumps	B.Conc	100
38.00	Pumps	B.Conc	100
40.00	Pumps	B.Conc	20
50.00	Controller	Stop	

Chromatogram

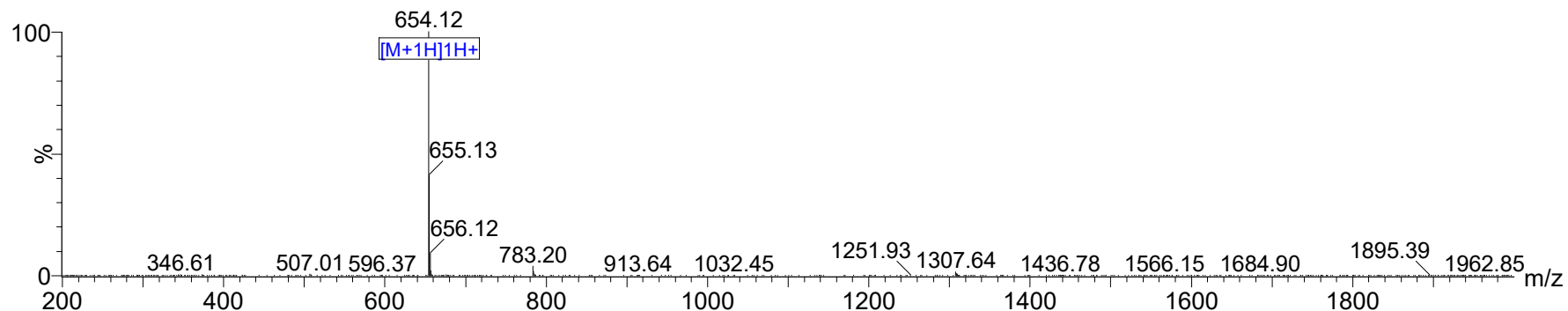


Peak Table

Detector A 214nm				
Peak#	Ret. Time	Area	Height	Area%
1	10.840	9908	1397	0.038
2	11.115	6119	788	0.024
3	11.467	605902	77939	2.345
4	11.867	74111	85745	0.287
5	11.980	24677947	1653837	95.504
6	12.304	452385	47179	1.751
7	17.361	13314	1817	0.052
Total		25839687	1868702	100.000

### MS Spectrum

Positive  
Intensity



Dissolution method	:15%ACN+85%H2O	Interface	:ESI	Prerod Bias	:+4.5kv
Date Acquired	:8/12/2023 2:52:48	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 : MTF30366-1  
 Name : beta-Casomorphin-5 peptide  
 Sequence : YPFVE  
 Lot.No : MTF30366-1-0810  
 Theoretical : 653.73  
 Observed : 653.12