

CERTIFICATE OF ANALYSIS

Product Name beta-Casomorphin (1-3) peptide, Cat.# 301191

Lot No. GTA34985-6-0222

Sequence YPF

Dissolution condition 100%H2O

Length 3AA

Modification N/A

Molecular Weight (MW) 425.47

Storage -20°C

Test Items	Specifications	Results
MW by MS	425.30	Conforms
Purity by HPLC	>95%	98.884%
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	10mg	5.0mg*2

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

Feb/28/2023



Sample Information

Order ID :GTA34985-6

Name :β-Casomorphin (1-3) peptide

Sequence :YPF

Lot. No :GTA34985-6-0222

Pump A :0.1%Trifluoroacetic in 100% water Pump B :0.1%Trifluoroacetic in 100% acetonitrile

Total Flow :1ml/min Wavelength :214nm

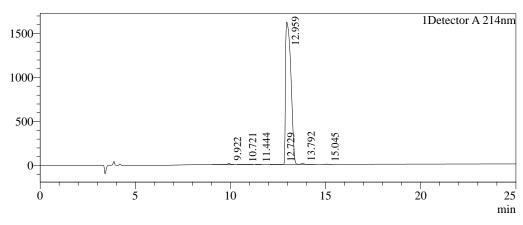
Analytial column type :YMC-Triart C18(4.6*250mm*5um)

Dissolution method :100%H2O Inj. Volume :15ul

Time Module Action Value 0.01 Pumps B.Conc 15 25.00 **Pumps** B.Conc 40 33.00 Pumps B.Conc 100 38.00 Pumps B.Conc 100 B.Conc 15 40.00 Pumps 50.00 Controller Stop

Chromatogram





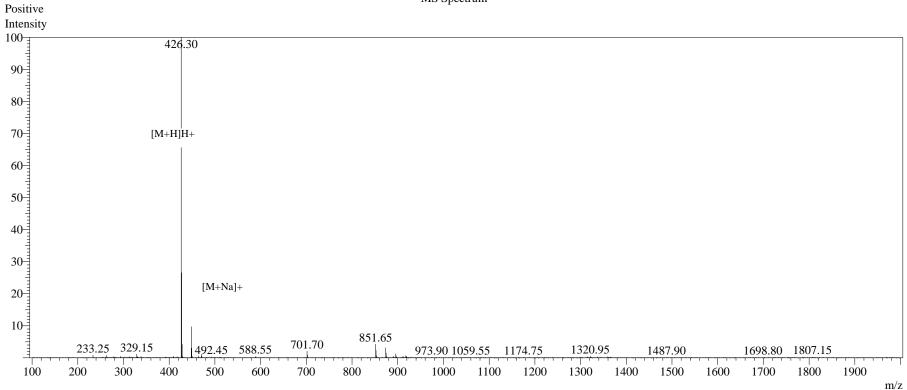
Peak Table

Detector A 214nm

Detector 17 21 tillin							
Peak#	Ret. Time	Area	Height	Area%			
1	9.922	150818	15873	0.461			
2	10.721	30123	1476	0.092			
3	11.444	5526	645	0.017			
4	12.729	16726	1109	0.051			
5	12.959	32352428	1620031	98.884			
6	13.792	132437	11144	0.405			
7	15.045	29568	3195	0.090			
Total		32717627	1653472	100.000			



MS Spectrum



Sample Information

Dissolution method	:15% ACN+85% H2O	Interface	:ESI	Prerod Bias	:+4.5kv
Date Acquired	:2023/02/27 16:01:52	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 :GTA34985-6

:β-Casomorphin (1-3) peptide :YPF Name

Sequence Lot.No :GTA34985-6-0222

Theoretical :425.47 Observed :425.30