

## CERTIFICATE OF ANALYSIS

Product Name	Opiorphin peptide, Cat.#: 304579
Lot No.	MTFA32522-0305
Sequence	QRFSR
Dissolution condition	100%H <sub>2</sub> O
Length	5AA
Modification	N/A
Molecular Weight (MW)	692.77
Storage	-20°C

Test Items	Specifications	Results
MW by MS	692.90	Conforms
Purity by HPLC	>95%	98.203%
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:



Mar/07/2025

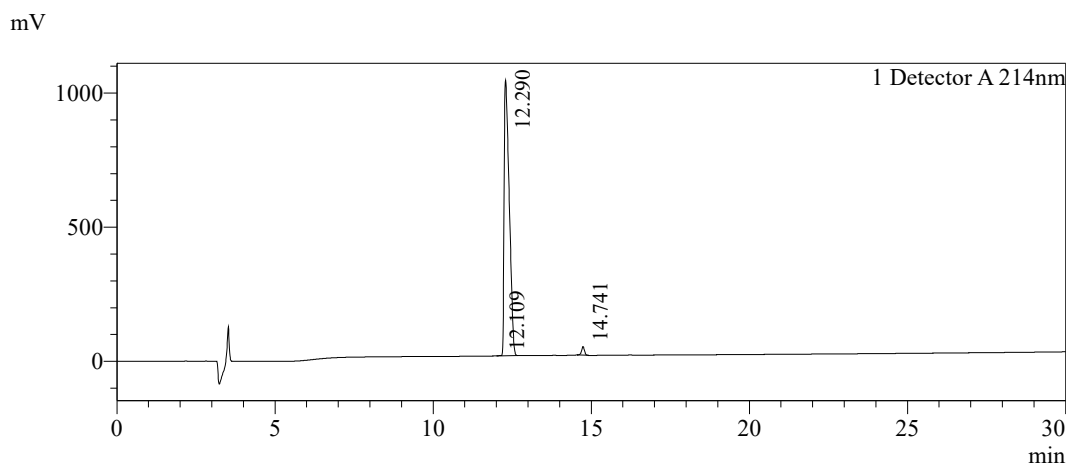
Quality Assurance Department



### Sample Information

Order ID	:MTFA32522		
Name	:Opiorphin		
Sequence	:QRFSR		
Lot. No	:MTFA32522-0305		
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	:Kromasil 100-5-C18 (4.6*250mm*5 µm)		
Dissolution method	:100%H <sub>2</sub> O		
Inj. Volume	: 15ul		
Time	Module	Action	Value
0.01	Pumps	B.Conc	5
30.00	Pumps	B.Conc	35
33.00	Pumps	B.Conc	100
38.00	Pumps	B.Conc	100
40.00	Pumps	B.Conc	5
50.00	Controller	Stop	

### Chromatogram

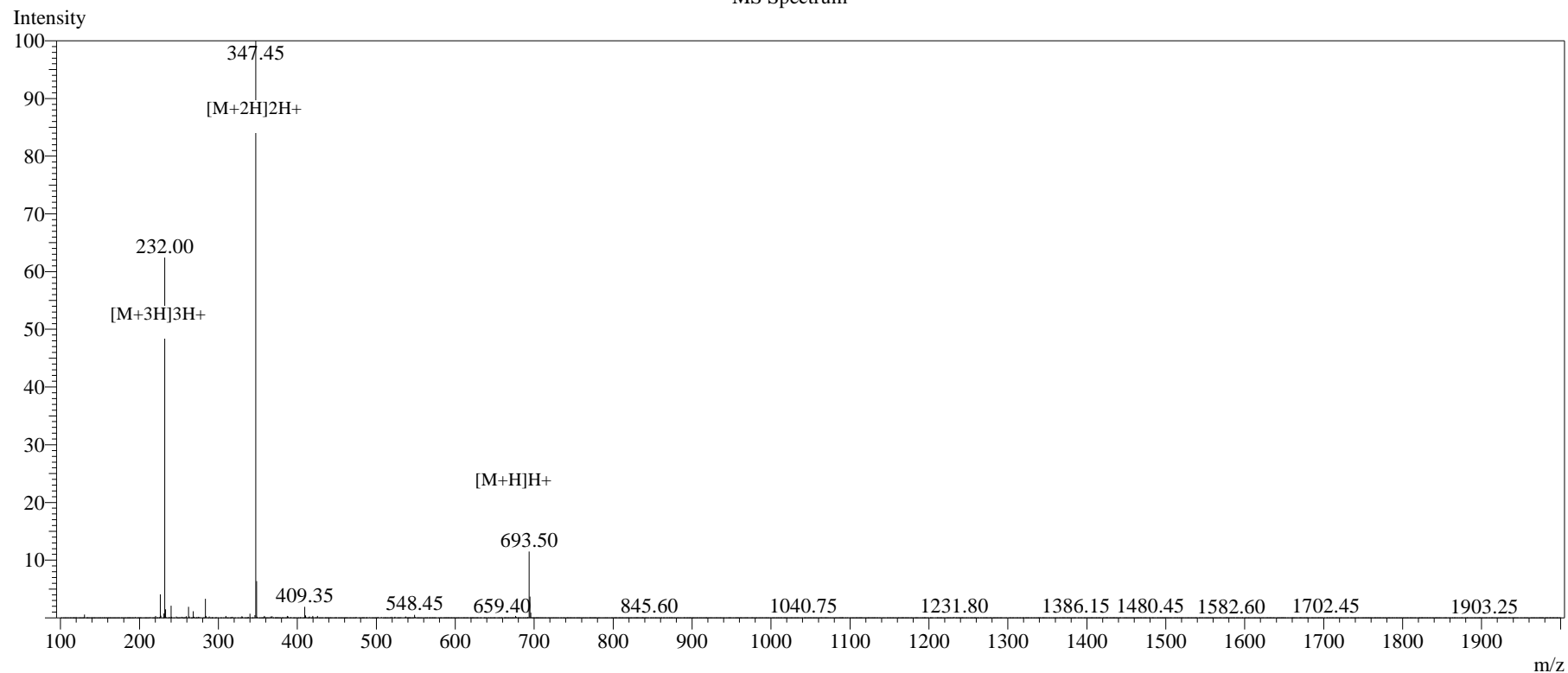


### Peak Table

Detector A 214nm

Peak#	Ret. Time	Area	Height	Area%
1	12.109	7519	1499	0.064
2	12.290	11622966	1026658	98.203
3	14.741	205161	32143	1.733
Total		11835645	1060299	100.000

# MS Spectrum



## Sample Information

Dissolution method :15% ACN+85% H<sub>2</sub>O  
 Date Acquired :2025/03/06 15:12:41  
 Injection Volume :0.2ul  
 Block Temp :200

Interface :ESI  
 Nebulizing Gas Flow :1.50L/min  
 CDL Temp :250°C  
 CDL Volt :0v

Prerod Bias :+4.5kv  
 Detector :-0.2kv  
 T.Flow :0.2ml/min  
 B.conc :50% H<sub>2</sub>O/50% ME OH

Order ID :MTFA32522  
 Name :Opiorphin  
 Sequence :QRFSR  
 Lot.No :MTFA32522-0305  
 Theoretical :692.77  
 Observed :692.90