

**CERTIFICATE OF ANALYSIS**

<b>Product Name</b>	Casein alpha-s1 [186-197], Cat.#: 309837
<b>Lot No.</b>	GTA34413-1-0728
<b>Sequence</b>	IGSENSEKTTMP
<b>Dissolution condition</b>	100%H2O
<b>Length</b>	12AA
<b>Modification</b>	N/A
<b>Molecular Weight (MW)</b>	1293.40
<b>Storage</b>	-20°C

<b>Test Items</b>	<b>Specifications</b>	<b>Results</b>
<b>MW by MS</b>	1293.40	Conforms
<b>Purity by HPLC</b>	>95%	97.529%
<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>	5mg	5.0mg

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/14/2022



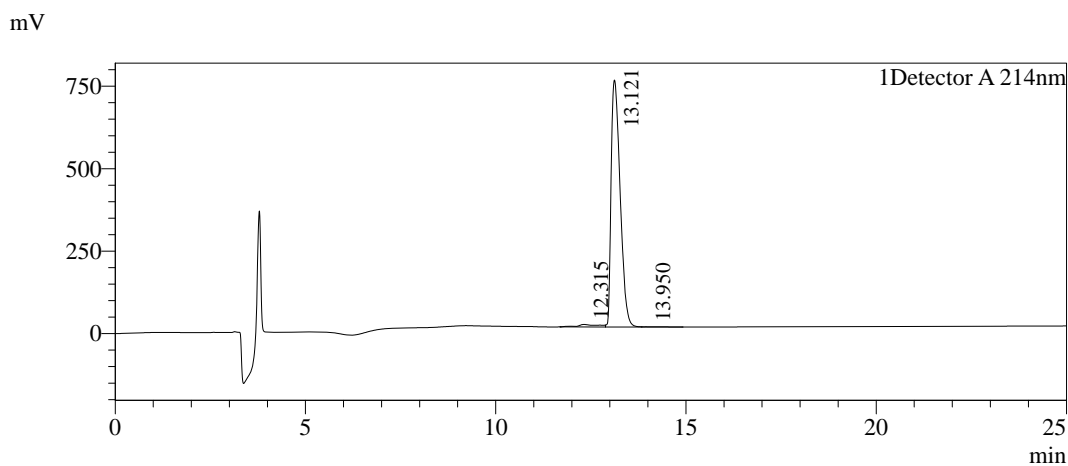
### Sample Information

Order ID	:GTA34413-1
Name	:Casein alpha-s1 186-197
Sequence	:IGSENSEKTTMP
Lot. No	:GTA34413-1-0728
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	:YMC-Triart C18(4.6*250mm*5um)
Dissolution method	:100% H2O
Inj. Volume	: 25ul

Time	Module	Action	Value
0.01	Pumps	B.Conc	10
25.00	Pumps	B.Conc	35
33.00	Pumps	B.Conc	100
38.00	Pumps	B.Conc	100
40.00	Pumps	B.Conc	10
50.00	Controller	Stop	

### Chromatogram

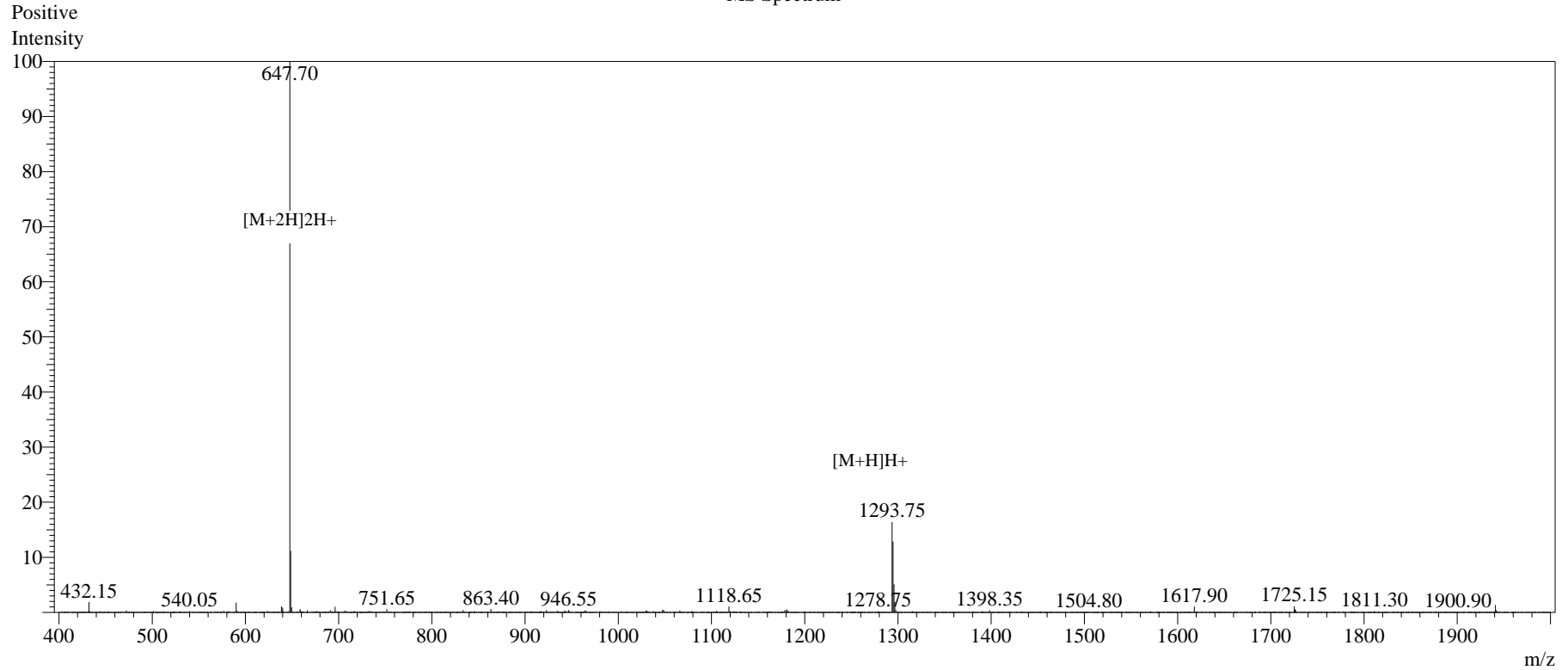


### Peak Table

Detector A 214nm

Peak#	Ret. Time	Area	Height	Area%
1	12.315	288302	7492	2.295
2	13.121	12251574	748474	97.529
3	13.950	22111	697	0.176
Total		12561988	756663	100.000

MS Spectrum



Sample Information

Dissolution method	:15%ACN+85%H <sub>2</sub> O	Interface	:ESI	Prerod Bias	:+4.5kv
Date Acquired	:2022/08/13 14:47:52	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%H <sub>2</sub> O/50%MEOH
Order ID	:GTA34413-1				
Name	:Casein alpha-s1 186-197				
Sequence	:IGSENSEKTTMP				
Lot.No	:GTA34413-1-0728				
Theoretical	:1293.40				
Observed	:1293.40				