

CERTIFICATE OF ANALYSIS

Product Name	RK-10, a specific PD-L1 binding peptide Cat.#: 318728
Lot No.	GTA32145-0703
Sequence	GSGSGSTYLCGAISLAPKAQIKESL-NH2(Desalt)
Dissolution condition	100%H2O
Length	25AA
Modification	TFA removed
Molecular Weight (MW)	2437.75
Storage	-20°C

Test Items	Specifications	Results
MW by MS	2437.95	Conforms
Purity by HPLC	>95%	95.013%
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	10 mg	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

July/30/2019

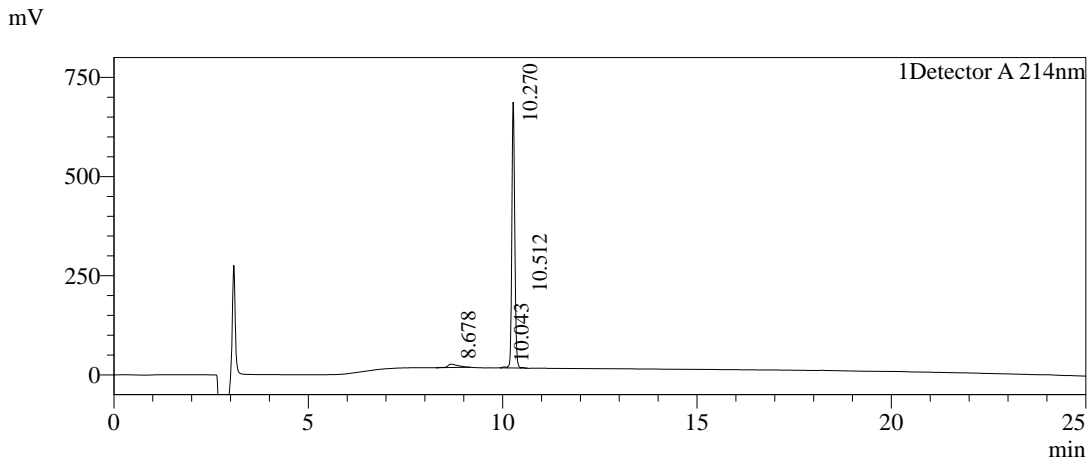


Sample Information

Order ID :GTA32145
 Name :N/A
 Sequence :GSGSGSTYLCGAISLAPKAQIKESL-NH2(Desalt)
 Lot. No :GTA32145-0703
 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 :SHIMADZU Inertsil ODS-SP(4.6*250mm*5um)
 Dissolution method :100%H2O
 Inj. Volume : 15ul

Time	Module	Action	Value
0.01	Pumps	B.Conc	20
25.00	Pumps	B.Conc	85
30.00	Pumps	B.Conc	100
38.00	Pumps	B.Conc	100
40.00	Pumps	B.Conc	20
50.00	Controller	Stop	

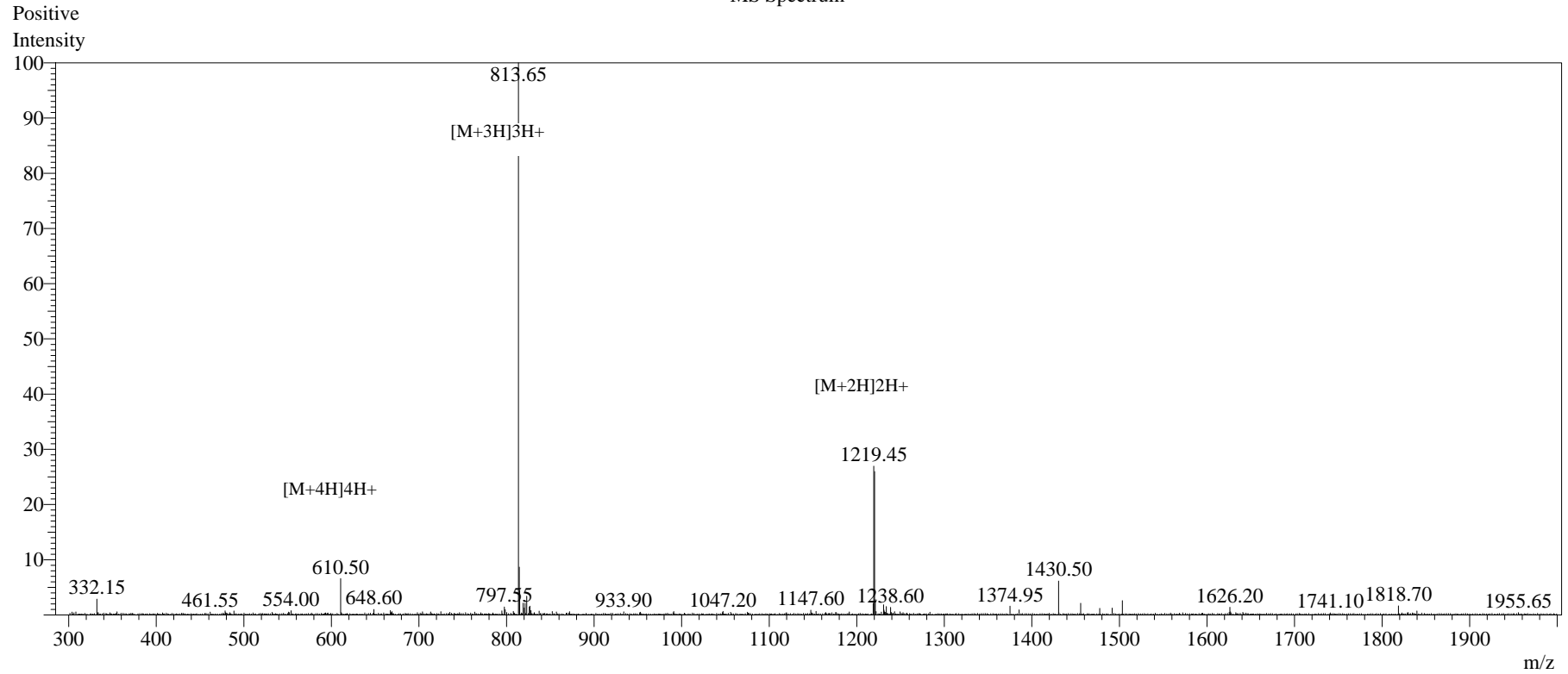
Chromatogram



Peak Table

Detector A 214nm				
Peak#	Ret. Time	Area	Height	Area%
1	8.678	156913	8724	4.241
2	10.043	18781	2598	0.508
3	10.270	3515252	670127	95.013
4	10.512	8820	1736	0.238
Total		3699765	683185	100.000

MS Spectrum



Sample Information

Dissolution method	:5% HAC+8% ACN+87% H2O	Interface	:ESI	Prerod Bias	:+4.5kv
Date Acquired	:2019/07/30 10:33:43	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	:GTA32145				
Name	:N/A				
Sequence	:GSGSGSTYLCGAISLAPKAQIKESL-NH2(Desalt)				
Lot.No	:GTA32145-0703				
Theoretical	:2437.75				
Observed	:2437.95				