

# Certificate of Analysis

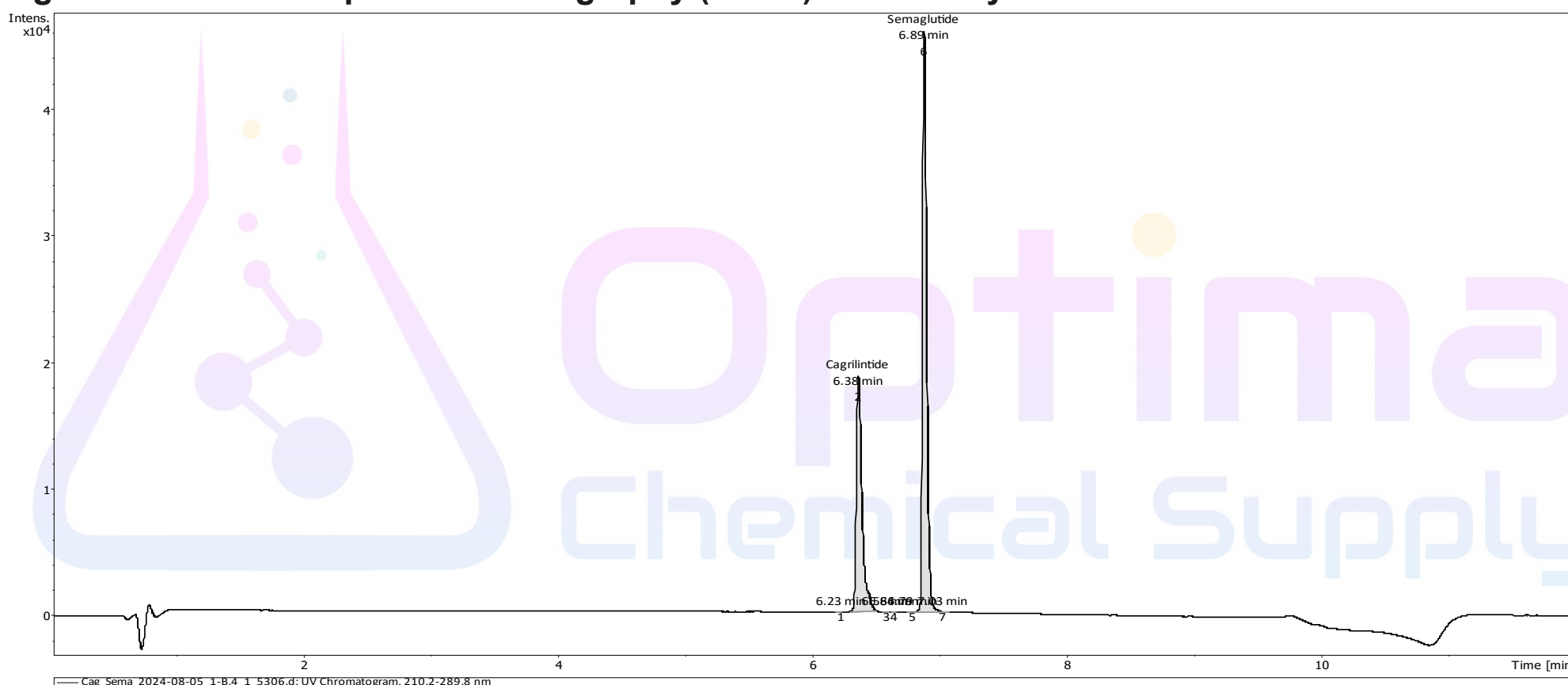
## Cagrilintide 5 mg + Semaglutide 5 mg

<b>Compound</b>	: Cagrilintide, Semaglutide	<b>Client</b>	: Optima Chemical Supply Inc.
<b>Lot number</b>	: 2024-08-05		<a href="http://www.optimasupply.net">http://www.optimasupply.net/</a>
<b>Analysis date</b>	: 2024-08-28		<a href="mailto:Support@optimasupply.net">Support@optimasupply.net</a>
<b>Purity %</b>	: 99.91%		
<b>Cagrilintide</b>	: 6.63 mg		
<b>Semaglutide</b>	: 6.51 mg		
<b>Method</b>	: HPLC-UV-MS		

Cagrilintide PubChem CID: 167312356  
<https://pubchem.ncbi.nlm.nih.gov/compound/167312356>

Semaglutide PubChem CID: 56843331  
<https://pubchem.ncbi.nlm.nih.gov/compound/56843331>

### High Performance Liquid Chromatography (HPLC) UV – Purity Test



PEAK LIST				Number of detected peaks: 7	
	Time (min)	Area	%Area		
1	6.23	2.00E+01	0.01		
2	<b>6.38</b>	<b>5.83E+04</b>	<b>35.40</b>	<b>Cagrilintide</b>	
3	6.58	3.83E+01	0.02		
4	6.64	2.95E+01	0.02		
5	6.79	4.05E+01	0.02		
6	<b>6.89</b>	<b>1.06E+05</b>	<b>64.51</b>	<b>Semaglutide</b>	
7	7.03	2.77E+01	0.02		

**Combined purity : 99.91**

Analysis Performed by  
 Ken Pendarvis, ChE  
 Analytical Chemist  
 MZ Biolabs  
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#### Quantification by HPLC-UV

Cagrilintide measured quantity : 6.63 mg/vial  
 Semaglutide measured quantity : 6.51 mg/vial

Note: Injectable peptides may contain salts and sugars to aid in solubility and act as pH buffers. These are not normally detected using UV and are not considered impurities.



2024-08-30

# Cagrilintide 5 mg + Semaglutide 5 mg

## Mass Spectrometry (MS) – Identity Test

Identity confirmed using HPLC-MS

### Cagrilintide

Molecular weight calculated using monoisotopic m/z values from mass spectrum

Expected monoisotopic mass : 4406.25 Da

Measured monoisotopic mass : 4406.3 Da

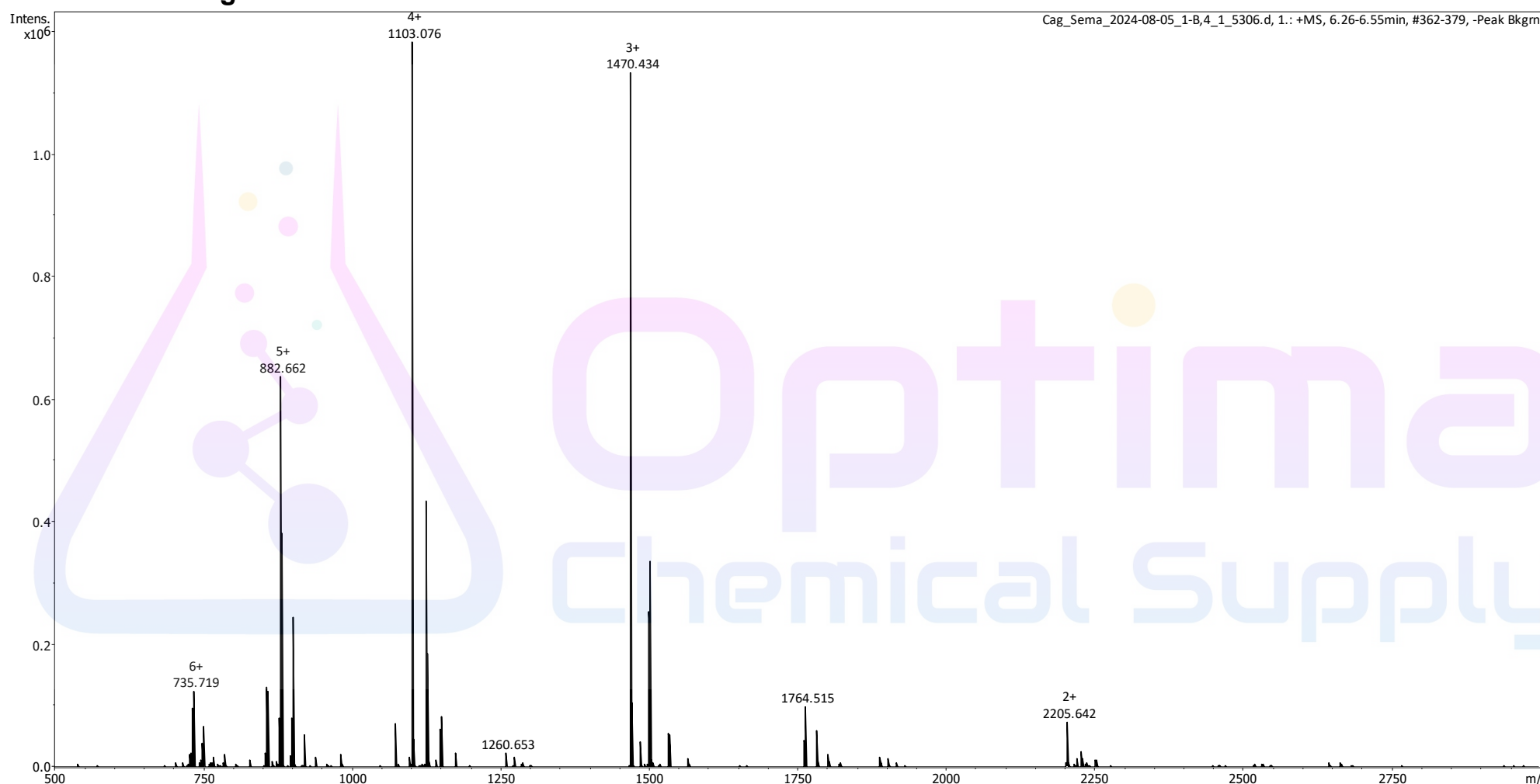
**Molecular weight confirmed**

Note : Monoisotopic m/z values are not easily seen in full spectrum view for larger molecules and peptides.

The dominant isotopic peak (base peak) shown in the spectrum below can be used to approximate the average molecular weight frequently reported by vendors and databases as a secondary means of confirmation.

Recorded MS spectra

### Cagrilintide



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2024-08-30

# Cagrilintide 5 mg + Semaglutide 5 mg

## Mass Spectrometry (MS) – Identity Test

Identity confirmed using HPLC-MS

### Semaglutide

Molecular weight calculated using monoisotopic m/z values from mass spectrum

Expected monoisotopic mass : 4111.12 Da

Measured monoisotopic mass : 4111.16 Da

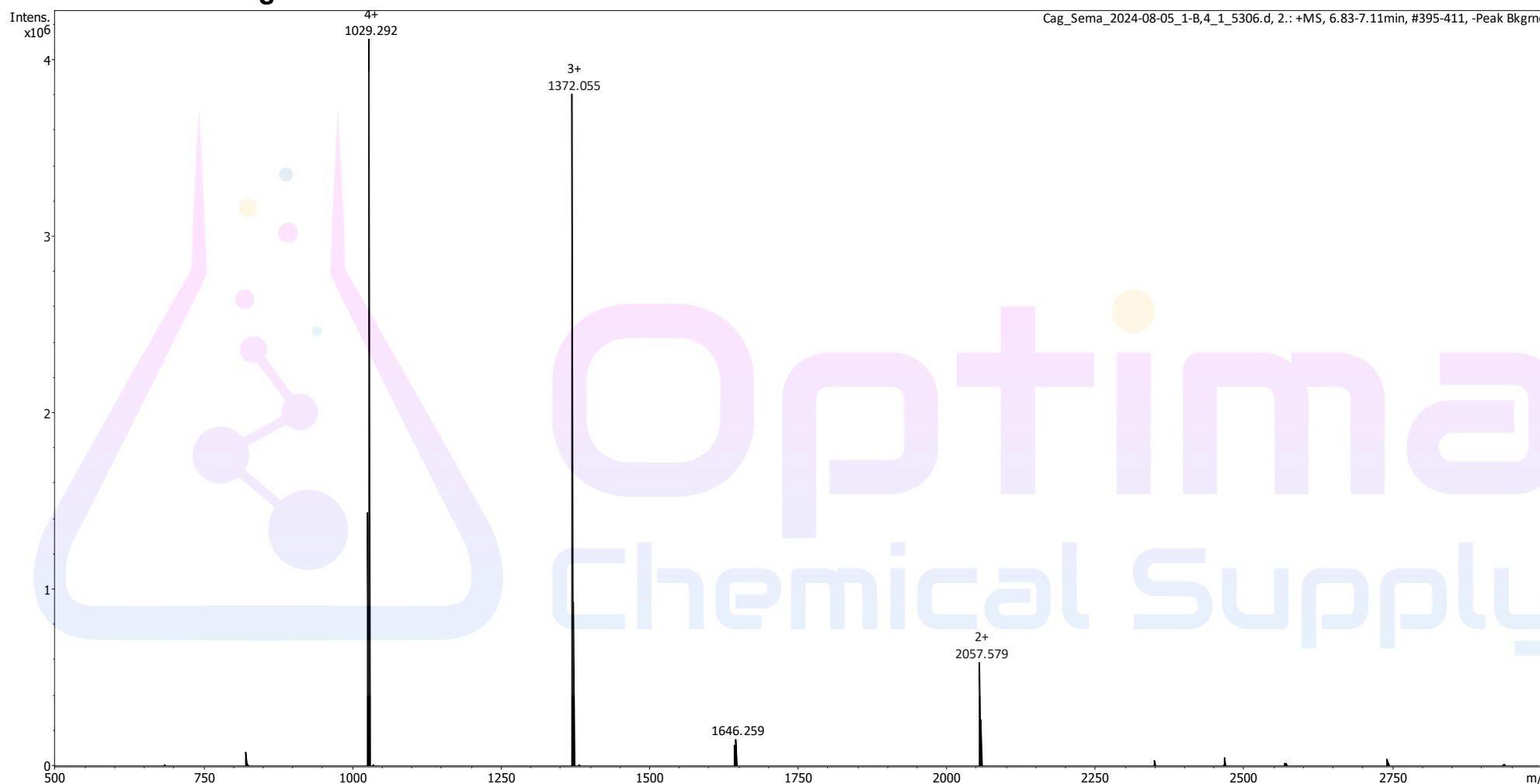
**Molecular weight confirmed**

Note : Monoisotopic m/z values are not easily seen in full spectrum view for larger molecules and peptides.

The dominant isotopic peak (base peak) shown in the spectrum below can be used to approximate the average molecular weight frequently reported by vendors and databases as a secondary means of confirmation.

Recorded MS spectra

### Semaglutide



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2024-08-30