

# Certificate of Analysis

## IGF-1 LR3

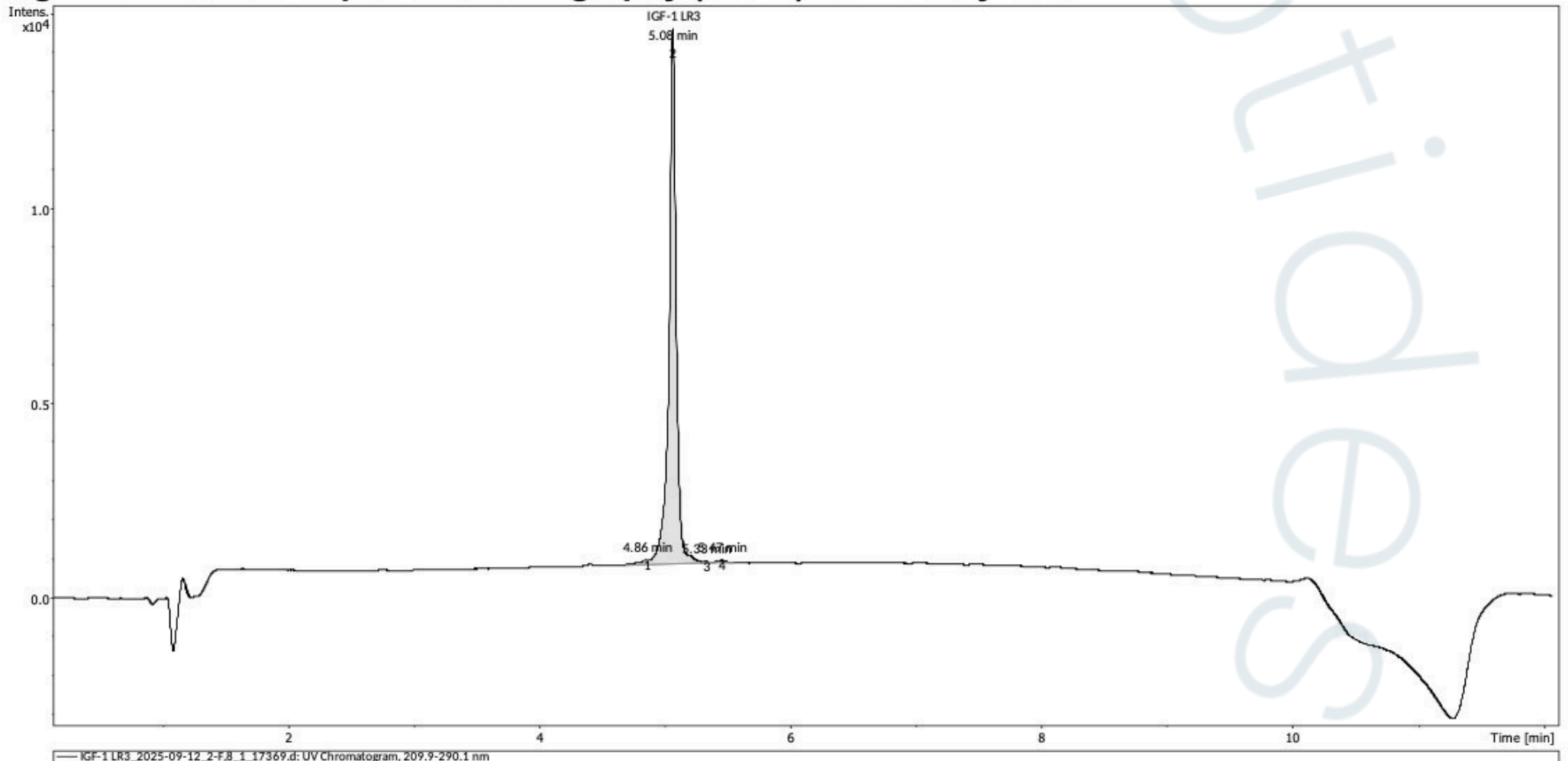
Long arginine 3 Insulin-like growth factor

**Compound** : IGF-1 LR3  
**Lot number** : 2025-09-12  
**Analysis date** : 2025-09-22  
**Purity %** : 99.50%  
**Method** : HPLC-UV-MS

**Client** : Tides Peptides  
[www.tidespeptides.com](http://www.tidespeptides.com)

CAS 143045-27-6

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



PEAK LIST		Number of detected peaks: 4		
	Time (min)	Area	%Area	
1	4.86	3.74E+01	0.07	
2	<b>5.08</b>	<b>5.58E+04</b>	<b>99.50</b>	<b>IGF-1 LR3</b>
3	5.33	9.90E+00	0.02	
4	5.47	2.31E+02	0.41	



Analysis Performed by  
 Ken Pendarvis, ChE  
 Analytical Chemist  
 MZ Biolabs  
[contact@mzbiolabs.com](mailto:contact@mzbiolabs.com)



2025-09-29

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.

# IGF-1 LR3

Long arginine 3 Insulin-like growth factor

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## Mass Spectrometry (MS) – Identity Test

### Identity confirmed using HPLC-MS

Molecular weight calculated using base peak m/z values from mass spectrum

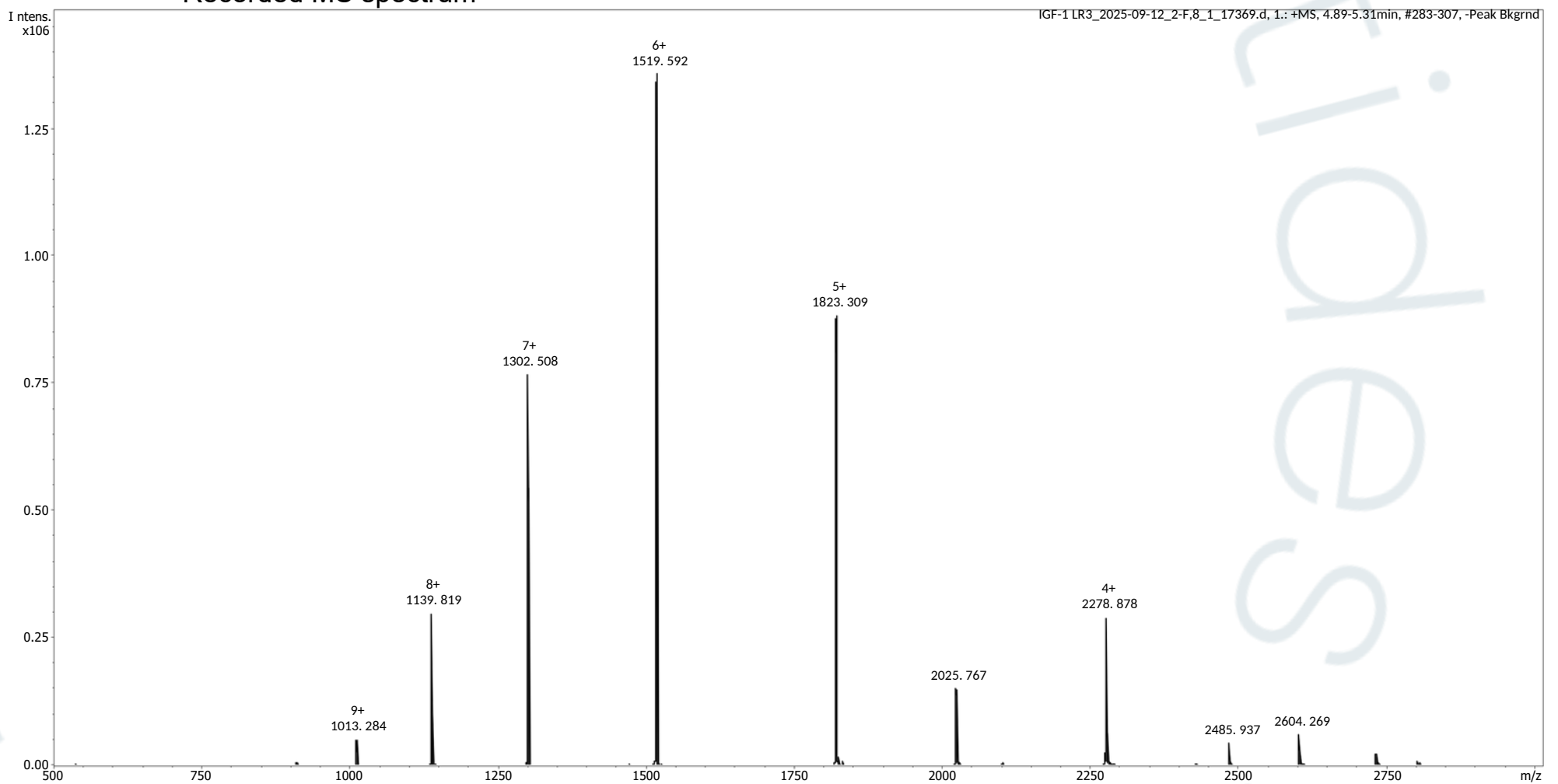
Expected average mass : 9111.40 Da

Measured base peak mass : 9111.40 Da

**Molecular weight confirmed**

Note : 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 spectrum



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## CERTIFICATE OF ANALYSIS

Product Name	LGF-1 LR3; Recombinant Human Long Arg3 insulin-like growth factor-1	CAS NO.	946870-92-4
Batch NO.	NCIGF250615	Molecular formula	C400H625N111O115S9
Manufacture Date	June 15, 2025	Molecular weight	9117.5
Sequence	MFPAMPLSSL FVNGPRTLPG AELVDALQFV CGDRGFYFNK PTGYGSSRR APQTGIVDEC CFRSCDLRRL EMYCAPLKPA KSA		

TEST	SPECIFICATION	RESULTS
Appearance	White powder	Conforms
Identity by HPLC	The retention time of the main principal of the test Solution corresponds to that of the reference Solution, as obtained in the assay	Conforms
Solubility	Soluble in water	Conforms
Purity(HPLC)	≥98%	99.2%
Mass Spectrum	9112±0.5	9112
Water	≤10.0%	4.4%
Sterility	Should be sterile	Sterile
pH	6.0~8.0	7.1
Content	Labelled Amount ±10%	Conforms
Bacterial Endotoxins	≤5.0EU/mg	Conforms
Cellular activity	≥1000000IU/mg	5000000IU/mg
Conclusion	This product conforms to the Enterprise Standard.	

**Note: this product is intended for research use only**

**Important: Stable at 2-8°C, but should be kept at -20°C for long term storage, preferably desiccated.**