

Certificate of Analysis

Glutathione 600mg

(2S)-2-amino-5-[[[(2R)-1-(carboxymethylamino)-1-oxo-3-sulfanylpropan-2-yl]amino]-5-oxopentanoic acid

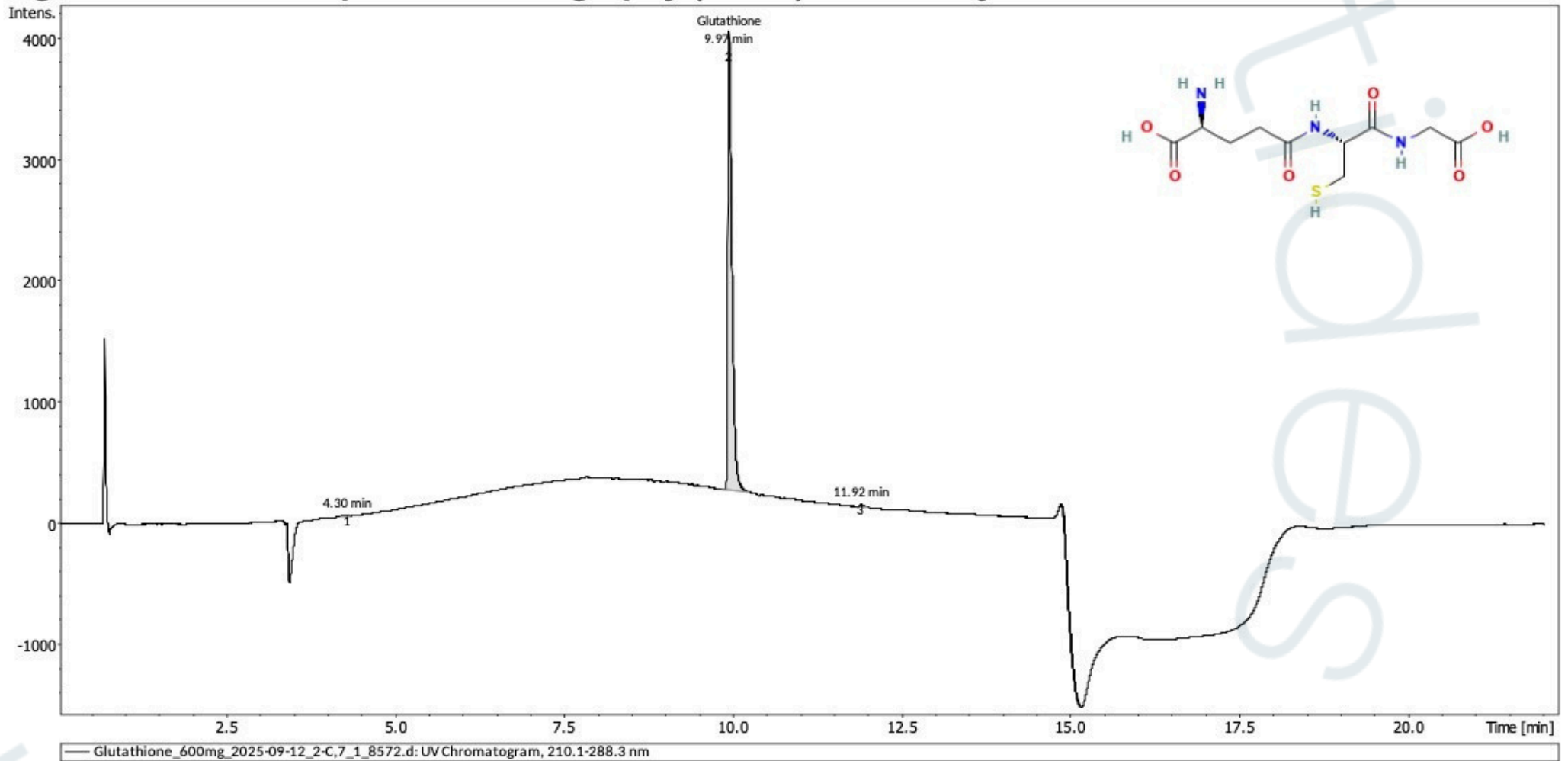
Compound : **Glutathione**
Lot number : **2025-09-12**
Analysis date : **2025-09-22**
Purity % : **99.27%**
Method : **HPLC-UV-MS**

Client : **Tides Peptides**
www.tidespeptides.com

PubChem CID: 124886

<https://pubchem.ncbi.nlm.nih.gov/compound/124886>

High Performance Liquid Chromatography (HPLC) UV – Purity Test



PEAK LIST				Number of detected peaks: 3	
	Time (min)	Area	%Area		
1	4.30	5.07E+01	0.32		
2	9.97	1.57E+04	99.27	Glutathione	
3	11.92	6.52E+01	0.41		



Analysis Performed by
 Ken Pendarvis, ChE
 Analytical Chemist
 MZ Biolabs
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.

Glutathione 600mg

(2S)-2-amino-5-[[[(2R)-1-(carboxymethylamino)-1-oxo-3-sulfanylpropan-2-yl]amino]-5-oxopentanoic acid

PubChem CID: 124886

<https://pubchem.ncbi.nlm.nih.gov/compound/124886>

Mass Spectrometry (MS) – Identity Test

Identity confirmed using HPLC-MS

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

Expected monoisotopic mass : 307.08 Da

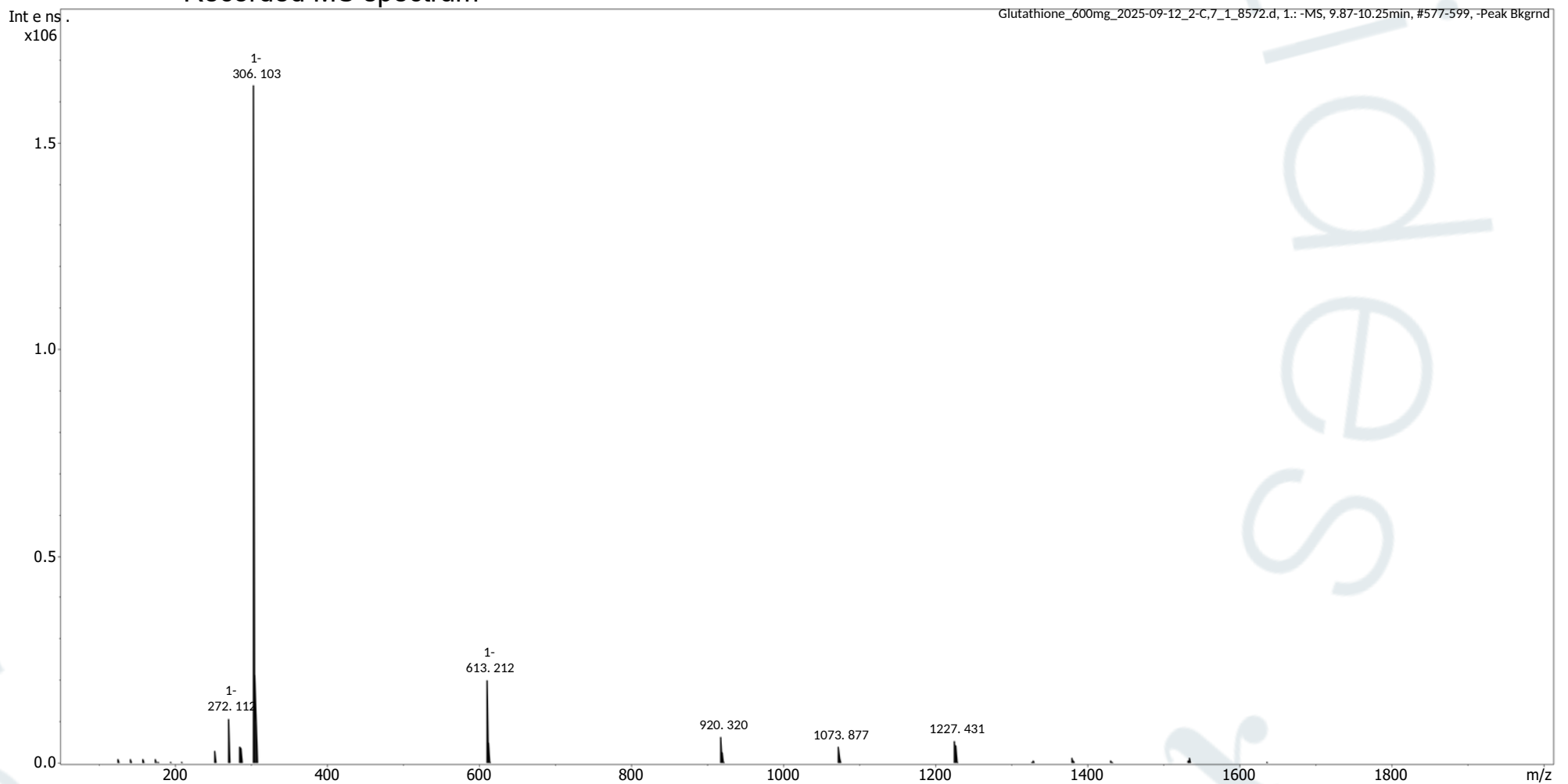
Measured monoisotopic mass : 307.10 Da

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 spectrum



Analysis Performed by
Ken Pendarvis, ChE
Analytical Chemist
MZ Biolabs
contact@mzbiolabs.com



2025-09-29

CERTIFICATE OF ANALYSIS

Product Name	L-Gluthathione Reduced	Batch Number	NCGR250622
Standard	In-house standard	Analysis Date	June. 22, 2025
Batch Quantity	60kg	Expiry date	June. 21, 2028

Items	Specifications	Results
Appearance	A White crystalline powder	A White crystalline powder
Melting point	183 ~ 187°C	187.0°C
Identification	Chemical: Positive reaction	Positive reaction
	Similar with the reference spectrum	Conforms
Optical rotation	-15.5~-17.5°	-16.1°
Appearance of solution	Clear and colorless	Clear and colorless
Heavy metals	Not more than 10ppm	Conforms
Arsenic	Not more than 1ppm	Conforms
Ammonium(NH ₄)	Not more than 0.020%	Conforms
Sulfate	Not more than 0.048%	Conforms
Iron(Fe)	Not more than 10ppm	Conforms
Loss on drying	Not more than 0.5%	0.38%
Residue on ignition	Not more than 0.10%	0.09%
Related substances	Total not more than 2.0%	1.19%
	GSSG not more than 1.5%	0.55%
Purity(HPLC)	Not less than 98.0%	98.6%
Conclusion	Conforms with the In-house 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.