

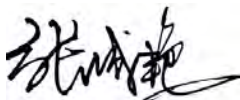
## CERTIFICATE OF ANALYSIS

Product Name	API137, Cat.#: 318720
Order ID	MTFA32559
Lot No.	MTFA32559-0317
Sequence	{N,N,N',N'-tetramethylGuanidino}{ORN}NNRPVYIPRPRPPHPRL
Modification	N/A
Length	19AA
Storage	-20°C
Recommended Solvent*	Ultrapure water
Comments	TFA salt

Test Items	Specifications	Results
Molecular Weight	Theoretical MW: 2291.70	Consistent
HPLC purity	≥90.0%	93.946%
Appearance	White lyophilized powder	Conforms
Gross Weight	100 mg	20*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

Mar/19/2025



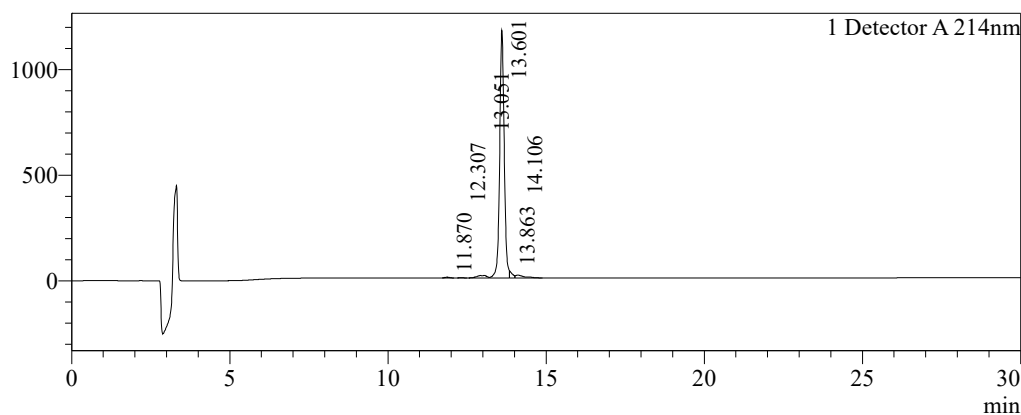
### Sample Information

Order ID :MTFA32559  
 Name :API137  
 Sequence :{N,N,N',N'-tetramethylGuanidino}{ORN}NNRPVYIPRPRPPHPRL  
 Lot. No :MTFA32559-0317  
 Pump A :0.1%Trifluoroacetic in 100% water  
 Pump B :0.1%Trifluoroacetic in 100%  
 Total Flow acetonitrile :1ml/min  
 Wavelength :214nm  
 Analytical column type :Kromasil 100-5-C18 (4.6\*250mm\*5 µm)  
 Dissolution method :100%H2O  
 Inj. Volume : 20ul  

Time	Module	Action	Value
0.01	Pumps	B.Conc	15
30.00	Pumps	B.Conc	45
33.00	Pumps	B.Conc	100
38.00	Pumps	B.Conc	100
40.00	Pumps	B.Conc	15
50.00	Controller	Stop	

### Chromatogram

mV

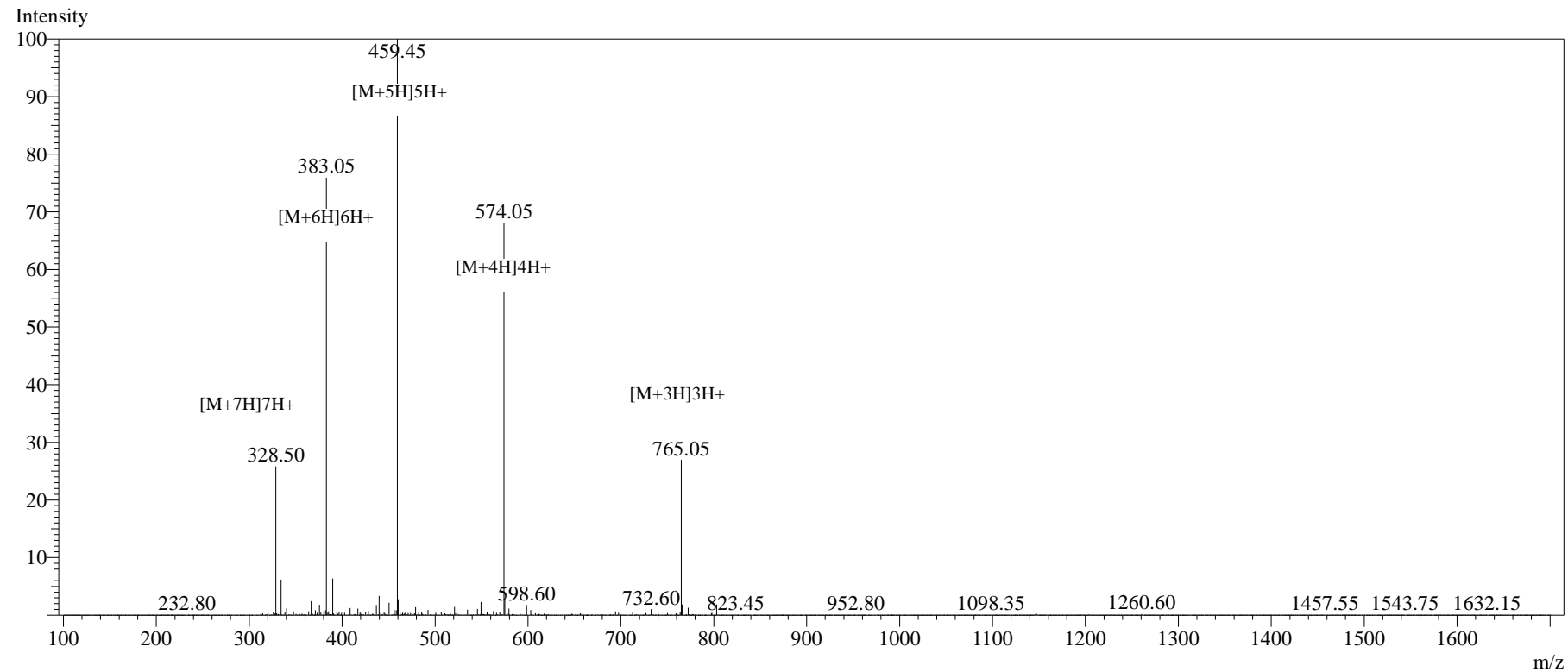


### Peak Table

Detector A 214nm

Peak#	Ret. Time	Area	Height	Area%
1	11.870	33210	3297	0.268
2	12.307	12108	1603	0.098
3	13.051	243882	11499	1.965
4	13.601	11660920	1171540	93.946
5	13.863	204575	31177	1.648
6	14.106	257647	13203	2.076
Total		12412342	1232319	100.000

# Mass Spectrum



## Sample Information

Dissolution method	:15%ACN+85H <sub>2</sub> O	Interface Nebulizing	:ESI	Prerod Bias	:+4.5kv
Date Acquired	:2025/03/18 16:16:39	Gas Flow CDL Temp	:1.50L/min	Detector	:-0.2kv
Injection Volume	:0.2ul	CDL Volt	:250°C	T.Flow	:0.2ml/min
Block Temp	:200		:0v	B.conc	:50%H <sub>2</sub> O/50%MEOH
Order ID	:MTFA32559				
Name	:API137				
Sequence	:{N,N,N',N'-tetramethylGuanidino} {ORN}NNRPVYIPRPRPPHPRL				
Lot.No	:MTFA32559-0317				
Theoretical	:2291.70				
Observed	:2292.25				

## Peptide Qualitative Solubility Test Report

Name	API137
Order ID	C4079IB070-1

Solvent	Results
ultrapure water	Soluble
0.1M PBS 7.4	Soluble
DMSO	Soluble

DPBS Dulbecco's Phosphate Buffered Saline, containing Potassium Chloride(KCl),Potassium Phosphate monobasic ( $\text{KH}_2\text{PO}_4$ ),Sodium Chloride (NaCl)and Sodium Phosphate dibasic ( $\text{Na}_2\text{HPO}_4 \cdot 7\text{H}_2\text{O}$ );

Comments:
1. The solubility of peptides is largely determined by the polarity of the peptides. Acidic proteins are dissolved in alkaline solutions, basic proteins can be dissolved in acidic solutions, and hydrophobic and neutral polypeptides containing a large number of uncharged polar amino acid residues or hydrophobic amino acids can be dissolved in a small amount of organic solvents first. Then dilute with water. Peptides with higher hydrophobicity are recommended to be dissolved in pure DMSO.
2. Freely soluble: the solvent is added to the sample, the sample dissolves immediately, and the solution is clear and transparent. Soluble: the solvent is added to the sample, the sample dissolves after shaking or sonication, and the solution is clear and transparent. Insoluble: The solvent is added to the sample, the solution is cloudy or flocculent by shaking or sonication. Note: The dissolved concentration of the sample is about 1mg/ml.
3. Peptides containing Cysteine (C), Methionine (M) or Tryptophan (W) are sensitive to oxidation by DMSO. We advise that peptides dissolved in DMSO be used immediately or stored at $-20^\circ\text{C}$ (or preferably $-80^\circ\text{C}$ ) prior to use. Usually, we recommend that the peptides be used in time after dissolving. If the solution peptides need to be stored, it is recommended to store them in small samples to avoid repeated freezing and thawing.
4. When the peptide is insoluble in the solvent of your choice, please refer to the table above for other suggested solvents.
5. Please note that distinct dissolution behaviors may happen between small amounts and large amounts of gross peptide in the same solvent. Generally, larger amounts of peptide take longer to dissolve.
6. The test results are for reference only, and the user needs to choose a suitable solvent according to the experimental needs.
Tested by: Ting Hu 03-19-2025