



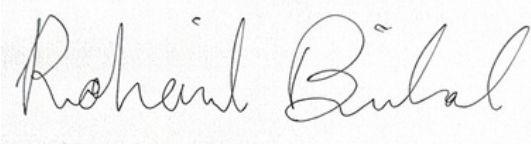
CERTIFICATION OF ANALYSIS

Product: Semaglutide 2.0mg /ml (1 mL via 10 mL vial)	INDC: 18139-220-04
Test Date: 12 December 2024	Batch No.: ProRx121124-1
Date of Mfg: 11 December 2024	Date of Exp: 10 June 2025

Test	Specification	Result
Appearance	Clear solution	Conforms
Semaglutide content by Eagle	2.20 to 2.70 mg /mL	2.09 mg /mL
Phenol content by Eagle	0.0 to 0.0 mg /mL	0.00 mg /mL
Sterility by ScanRDI	Conforms to sterility test as per USP <71>	Pass
Endotoxin	Conforms to specifications as per USP <85>	Pass
Particulate	Conforms to specifications as per USP <788>	Pass

Results excluding osmolality, appearance, and pH transcribed from third-party testing from Eagle Analytical.

Conclusion: Test results comply with product specifications

Pharmacist In Charge: Initials /Date		12/19/2024
Reviewed by: Initials /Date	Ais n Smi	19 Dec 2024



CERTIFICATION OF ANALYSIS	
Product: Tirzepatide 20 mg /mL (3 mL vial)	NDC: 88139-2110-02
Test Date: 12 March 2020	Batch No.: ProRx-31120-2
Date of Mfg: 11 March 2020	Date of Exp: 07 September 2020

Test	Specification	Result
Appearance	Clear solution	Conforms
Tirzepatide content by Eagle	18.00 to 22.00 mg /mL	20.0 mg /mL
Phenol content by Eagle	0.0 to 0.0 mg /mL	0.29 mg /mL
Sterility by ScanRDI	Conforms to sterility test as per USP <71>	Pass
Endotoxin	Conforms to specifications as per USP <85>	Pass
Particulate	Conforms to specifications as per USP <788>	Pass

Results excluding appearance transcribed from third-party testing from Eagle Analytical.

Conclusion: Test results comply with product specifications

Approved by: Initials /Date		18 March 2020
Reviewed by: Initials /Date	Aislynn Smith	18 Mar 2020



LABORATORY REPORT

ProRx
619 Jeffers Circle
Exton, PA 19341

Phone: 850-554-7809

Account #: E71770
Sample Name: Tirzepatide 60mg/3ml
Lot #: Prorx031125-2
Storage Conditions: Refrigerated

Date Received: 3/12/2025

Submission #: ETX-250311-0119



Chemistry Tests:

Potency (Peptides) (Tirzepatide : 2.00000 %)

Date Started: 3/13/2025 Date Completed: 3/17/2025

Measured Concentration: 2.00 %
Potency: 100.0 %
Method: USP<621>
Disclaimer:

This testing was performed in accordance with the CGMP regulations, using a formulation-specific validated analytical method.

Potency (Solution) (Phenol : 0.50000 %)

Date Started: 3/13/2025 Date Completed: 3/17/2025

Measured Concentration: 0.529 % 105.8 % USP<621>
Potency:
Method:
Disclaimer:

This testing was performed in accordance with the cGMP regulations, using a formulation-specific validated analytical method.

Microbiology Tests:

ScanRDI Sterility Test

Date Started: 3/12/2025 Date Completed: 3/14/2025

Method Suitability: ETX-241029-0220
Result:

Pass

USP <788> Particulate Matter in Injections

Date Started: 3/13/2025 Date Completed: 3/14/2025

Test Method: Small Volume Injection -
10um (Numerical): Small Volume Injection
- 10um (Pass/Fail): Small Volume Injection
- 25um (Numerical): Small Volume
Injection - 25um (Pass/Fail):

USP<788> - Method 1 Light Obscuration Particulate Count Test
129.2000 Particles/Container
Pass
0.2000 Particles/Container
Pass

USP <85> Bacterial Endotoxin Test

Date Started: 3/13/2025 Date Completed: 3/14/2025

Numerical Value : <10 EU/mL
Endotoxin Limit: 350 EU/mL
Result: Pass



CERTIFICATION OF ANALYSIS

Product: Nicotinamide Adenine Dinucleotide (NAD) 100 mg/ml 10 ml MDV	
NDC: 88139-310-10	
Test Date: 02 May 2020	Batch No.: ProRx-2020-3
Date of Mfg: 20 Apr 2020	Date of Exp: 28 Jul 2020

Test	Specification	Result
Appearance	Clear to yellow solution	Conforms
NAD content	90 to 110 mg/mL	97.8 mg/mL
Benzyl Alcohol content	0.9 to 1.1 mg/mL	1.01 mg/mL
Sterility by ScanRDI	Conforms to sterility test as per USP <71>	Pass
Endotoxin	Conforms to specifications as per USP <85>	Pass
Particulate	Conforms to specifications as per USP <788>	Pass

Results excluding appearance transcribed from third-party testing from Eagle Analytical Services Inc.

Conclusion: Test results comply with product specifications

Pharmacist In Charge: Initials/Date	Matthew Bross	2025-05-05
Reviewed by: Initials/Date	Aislynn Smith	2025-05-05



浙江湃肽生物股份有限公司

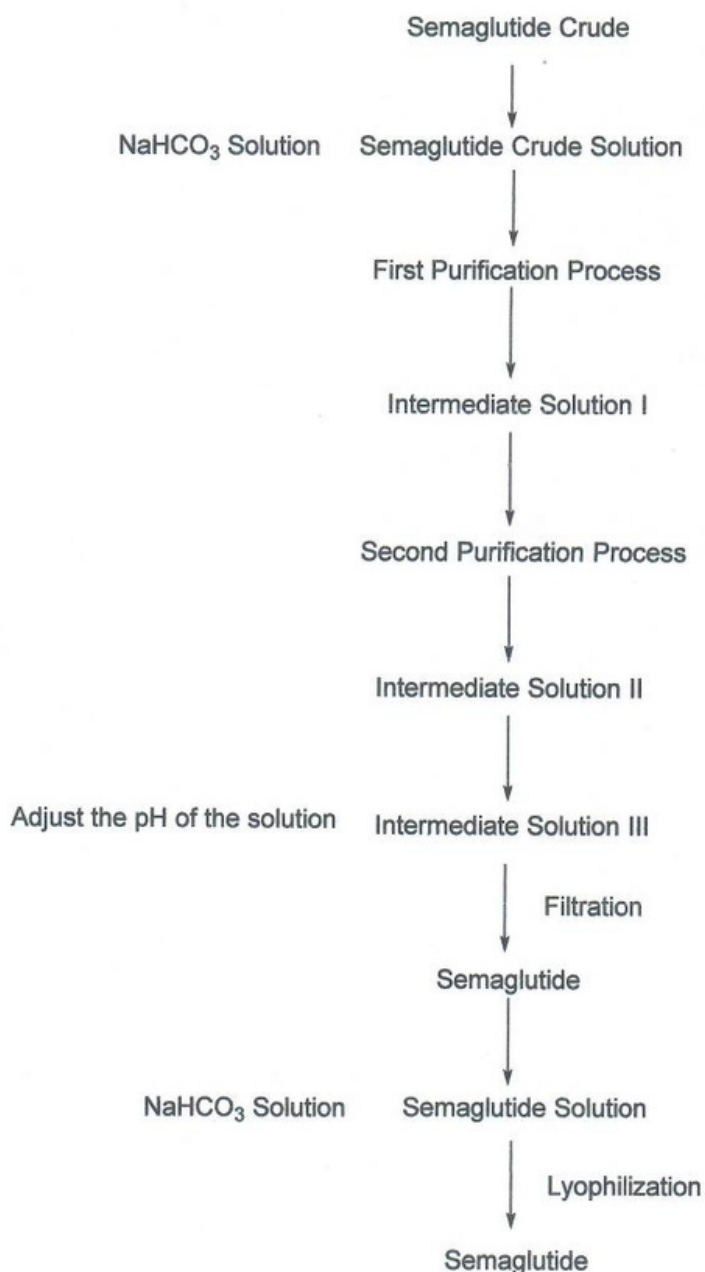
Zhejiang Peptides Biotech Co., Ltd.

Address: No.8,Hengyizhi Road,
Sanjie Town, Shengzhou City,
Shaoxing City, Zhejiang 312452, China

Tel: ++86-575-83130006-8023
Email:zpc@peptide-china.com
<https://www.peptide-china.com>

Declaration of Semaglutide API Salt Free Form

The Semaglutide API manufactured by Zhejiang Peptides Biotech Co., Ltd. is obtained through solid phase peptide synthesis, cleavage of resin-bound peptide, reverse phase HPLC purification and lyophilization. The flow chart from the purification to the end of the process is displayed as follows:





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- 1) Starting from AM resin Fmoc protected amino acids (for some residues, Fmoc protected dipeptide fragments as building blocks) were assembled stepwisely from the C-terminal to the N-terminal according to the sequence of Semaglutide. When it came to the branch site, the side chain was preferentially constructed and then the assembling of the main chain continued. After solid phase peptide synthesis, resin-bound peptide was obtained.
- 2) After cleavage of resin-bound peptide and precipitation of cleavage cocktail, the crude product of Semaglutide was obtained.
- 3) Through dissolving of the crude product, and then primary purification and secondary purification, Semaglutide solution with qualified purity was obtained.
- 4) With pH adjustment and precipitation, the solid state of Semaglutide API was obtained. In order to adjust the dispersity and homogeneity, sodium bicarbonate solution was charged. The obtained solution was filtered, then lyophilized to afford the final product.

In conclusion, the API of Semaglutide obtained by our process is salt free. The charge of sodium bicarbonate solution in the process is used for cosolvation. The resulting sodium cations exist as residue in the final API. Therefore, it is hereby declared that the Semaglutide API manufactured by Zhejiang Peptides Biotech Co., Ltd. is a salt-free form.

Signature: 杨志刚 Yang Zhigang (QP)

Date: 2023.06.29



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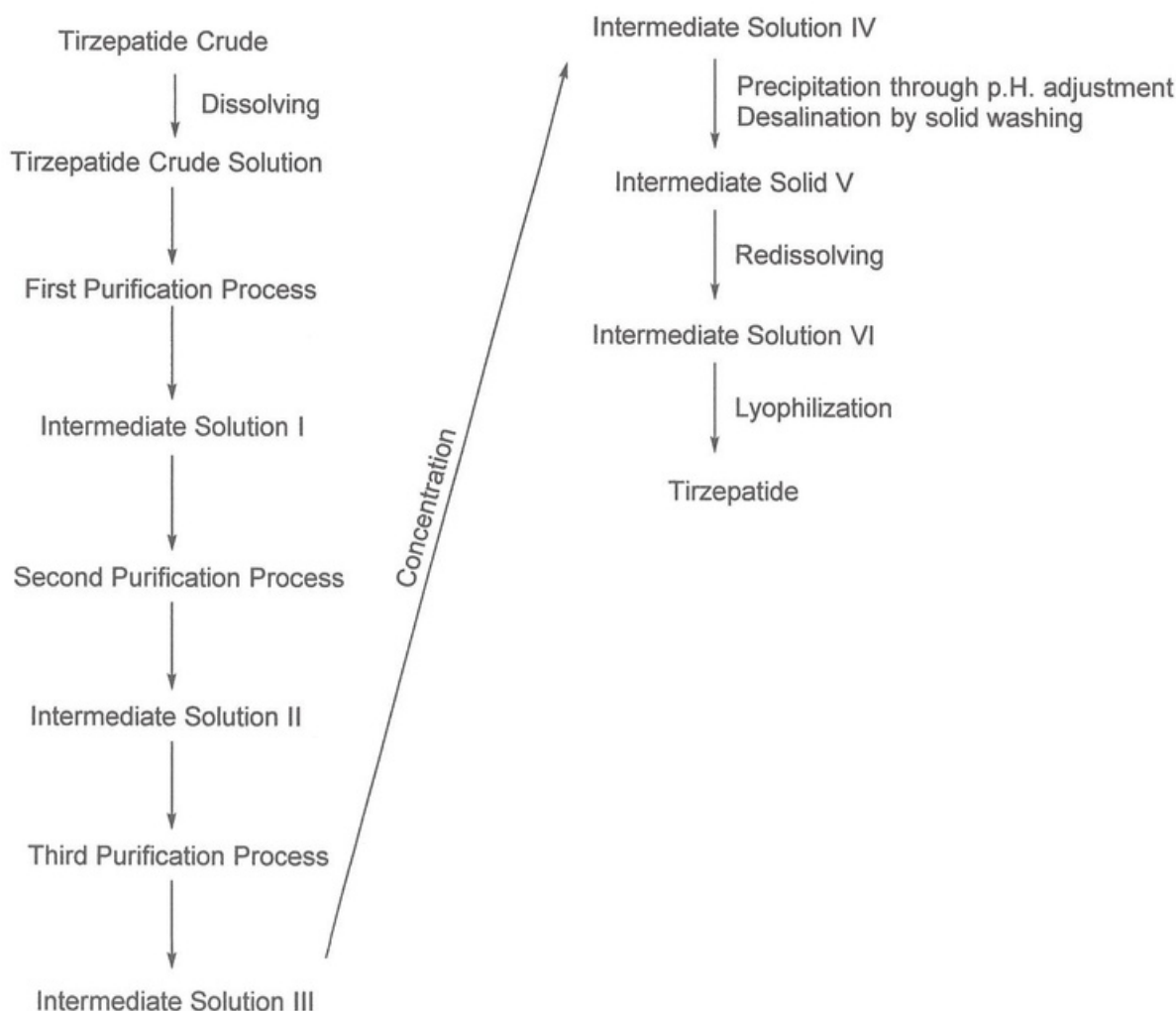
Tel: ++86-575-83837999

Email:zpc@peptide-china.com

<https://www.peptide-china.com>

Declaration of Tirzepatide API Salt Free Form

The Tirzepatide API manufactured by Zhejiang Peptides Biotech Co., Ltd. is obtained through solid phase peptide synthesis, cleavage of resin-bound peptide, reverse phase HPLC purification and lyophilization. The flow chart from Tirzepatide crude to Tirzepatide process is displayed as follows:



1) Starting from Rink-Amide AM resin Fmoc protected amino acids (for some residues, Fmoc protected dipeptide, Boc protected tetrapeptide, Fmoc protected pentapeptide fragments acted as building blocks) were assembled stepwisely from the C-terminal to the N-terminal according to the sequence of Tirzepatide.



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<https://www.peptide-china.com>

2) The resin-bound peptide obtained from step 1 was then cleaved and the cleavage cocktail solution was precipitated to yield Tirzepatide Crude.

3) Through dissolving of the crude product, primary purification, secondary purification, and tertiary purification, Tirzepatide solution with qualified purity was obtained (Intermediate Solution III in the flow chart). It was then concentrated to afford Intermediate Solution IV.

4) With pH adjustment and precipitation, the solid state of Tirzepatide API was obtained. It was then rinsed with solvent to remove the salt. In order to adjust the dispersity and homogeneity, sodium hydroxide solution was charged. The obtained solution was filtered for sterilization, then lyophilized to afford the final product.

In conclusion, the API of Tirzepatide obtained by our process is salt free. The charge of sodium hydroxide solution in the process is used for cosolvation. The resulting sodium cations exist as residue in the final API. Therefore, it is hereby declared that the Tirzepatide API manufactured by Zhejiang Peptides Biotech Co., Ltd. is a salt-free form.

Signature:

Date:

[Handwritten Signature]
2024.05.23

