

## 质量分析报告 (COA)

### Certificate of analysis

产品名称 Product Name	Tirzepatide CAS:2023788-19-2	目录编号 Catalog No.	Z-peptide-C0163
盐类型 Salt Type	Na	批号 Batch No.	P23022801
序列 Sequence	Tyr- $\{Aib\}$ -Glu-Gly-Thr-Phe-Thr-Ser-Asp-Tyr-Ser-Ile- $\{Aib\}$ -Leu-Asp-Lys-Ile-Ala-Gln- $\{diacid-\gamma-Glu-(AFA)2-Lys\}$ -Ala-Phe-Val-Gln-Trp-Leu-Ile-Ala-Gly-Gly-Pro-Ser-Ser-Gly-Ala-Pro-Pro-Ser-NH <sub>2</sub>		
生产日期 Manufacturing Date	2023.02.28	接收日期 Received Date	2023.02.29
报告日期 Report Date	2023.03.01	复检日期 Retest Date	2025.03.01
检验依据 Test Reference	内物质量标准/协议质量标准 In-house specification/Protocol specification		

检测项目 Test Items	标准 Specification	结果 Results
外观 Appearance	本品为白色至类白色粉末或疏松块状物 White to off white powder or loose lump	Conforms
溶解性 Solubility	溶于水溶液 Soluble in H <sub>2</sub> O	Conforms
HPLC	The principal peak in the chromatogram obtained with the test solution is similar in retention time and size to the principal peak in the chromatogram obtained with reference solution	The principal peak in the chromatogram obtained with the test solution is similar in retention time and size to the principal peak in the chromatogram obtained with reference solution
分子量 Mass Spectrum	4813.45±1.0	4814.40
澄清度 Clarity and color of solution	无色澄清 Clear and colorless	Conforms
水分 Water	≤ 10.0%	3.5%
醋酸含量 Acetic acid	≤ 5.0%	N.D
钠离子 Sodium ion	≤ 3.0%	1.2%
有关物质 Related Substances (HPLC)	Any individual impurity: ≤ 1.0% Total impurity: ≤ 2.0%	0.74% 1.54%
纯度 Purity	≥ 98%	99.6%
细菌内毒素 Bacterial endotoxin	< 10EU/mg	Conforms
残留溶剂 Residual solvents	Methanol: ≤ 0.3% Isopropanol: ≤ 0.5%	Methanol: N.D Isopropanol: N.D



	Acetonitrile: $\leq 0.041\%$ Methylene chloride: $\leq 0.06\%$ N,N-Dimethylformamide: $\leq 0.088\%$ Tert-butyl methyl ether: $\leq 0.5\%$	Acetonitrile: 0.025% Methylene chloride: N.D N,N-Dimethylformamide: N.D Tert-butyl methyl ether: N.D
肽含量 Peptide Assay	$\geq 85.0\%$	conforms
包装和储存 Packaging and storage	2-8°C, 遮光保存。 Store at a temperature of 2-8°C, protected from light.	
结论 Conclusion	检测结果与内控质量标准相符。 The test results comply with the requirements of in-house specification.	
备注 Remark	仅作为化工产品供应。 It is only supplied as chemical product.	

起草/日期  
Prepared by/Date

复核/日期  
Reviewed by/Date

