WEPURE
微纯生物科技

WEPURE BIOTECH CHROMATOGRAPHY PACKING MATERIAL PARAMETER MANUAL

WEPURE BIOTECH CHROMATOGRAPHY PACKING MATERIAL PARAMETER

WePure Biotech (Guangzhou) Co., Ltd.

About WePure Biotech

WePure Biotech is committed to "Becoming an excellent supplier of Global Analysis,Testing, Separation & Purification Solution " .It is one of the few manufacturers in the world that fully masters the preparation technology of liquid chromatography silica gel and resin material. With more than 20 years of industry experience, the team has accumulated rich product application and method development experience. The company possesses a complete industrial chain that covers the production of raw material monomers for silica gel and resin microspheres, internationally leading surface bonding modification technology, analytical column, semi-prep column, and preparation packing material. It provides high-quality, cost-effective, stable supply, and rapid delivery of products and services to industries such as pharmaceutical, biotechnology, food safety, chemical,and environment.

THE GLOBAL SEPARATION & PURIFICATION SOLUTION PROVIDER

Main Product

- ◆MicroPulite® Analytical Columns
- ◆BioPulite® Bioanalytical column
- ◆PrePulite® Semi-Prep Columns/Semi-prep and Industrial Preparative Matersrial
- ◆UPulite® Sample Pre-Prep Packing Material /SPE
- ◆WeChromlite® Guard Column of analytical /Semi-Prep column

WePure Biotech's three technology platforms

01

Stable porous microsphere syntheses technology

WePure can produce microsphere in a stable and large scale, includes 1.7μm-100μm high-purity silica,organic-inorganic structure hybrid silica（XP）and high-strength silica（HSS）, inorganic-inorganic structure hybridized SiZ microspheres and soon.

02

Advanced surface modification technology

WePure provides triple bond C18/C8, double bond C18/C8, single bond C18/C8, NH_2, Amide,Hexyl-Phenyl,Fluoro-Phenyl（PFP）,Diol,RP18/18 Plus, PHS charged modification technology, unique T3 bond technology, mix mode bond technology, meet the needs of analysis,separation and purification.

03

High efficient and stable columns packing platform

WePure products cover UPLC, UHPLC, HPLC and semi-preparative columns, with stable production technology and strict testing, ensure excellent stability and reproducibility of column to column,batch to batch.

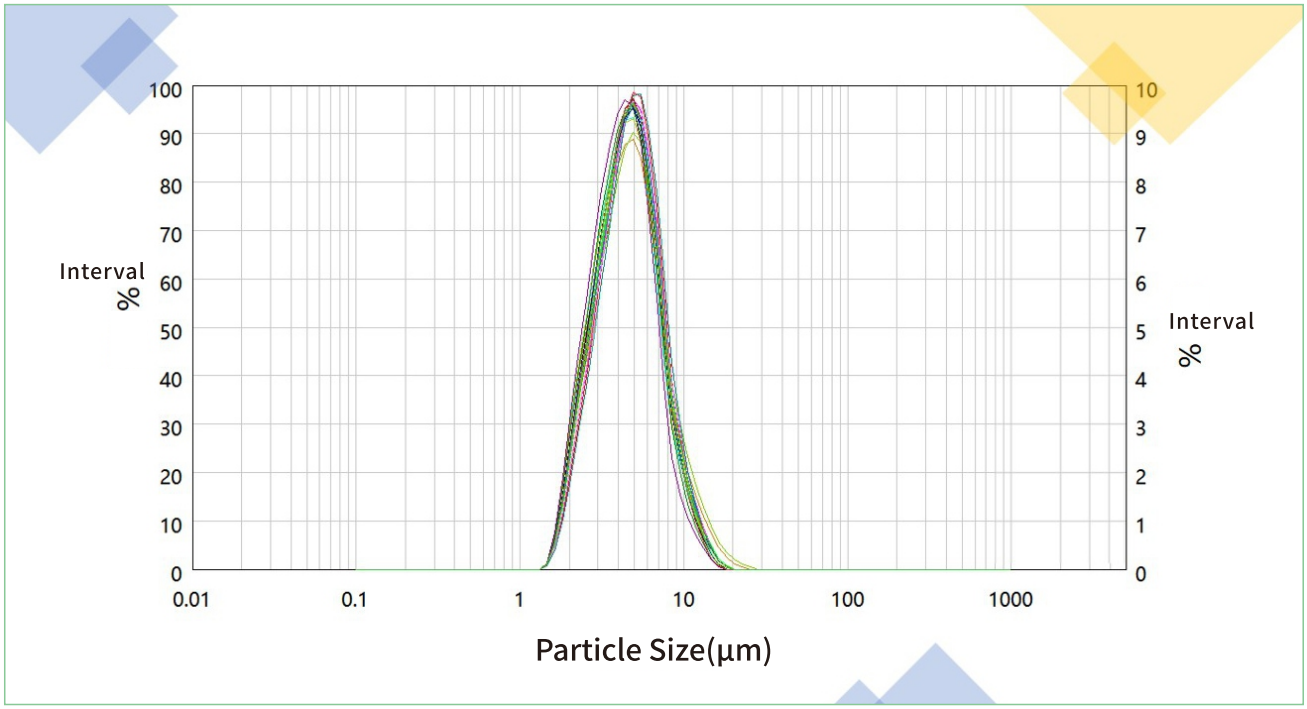
“WePure” Headquarter located in Guangdong

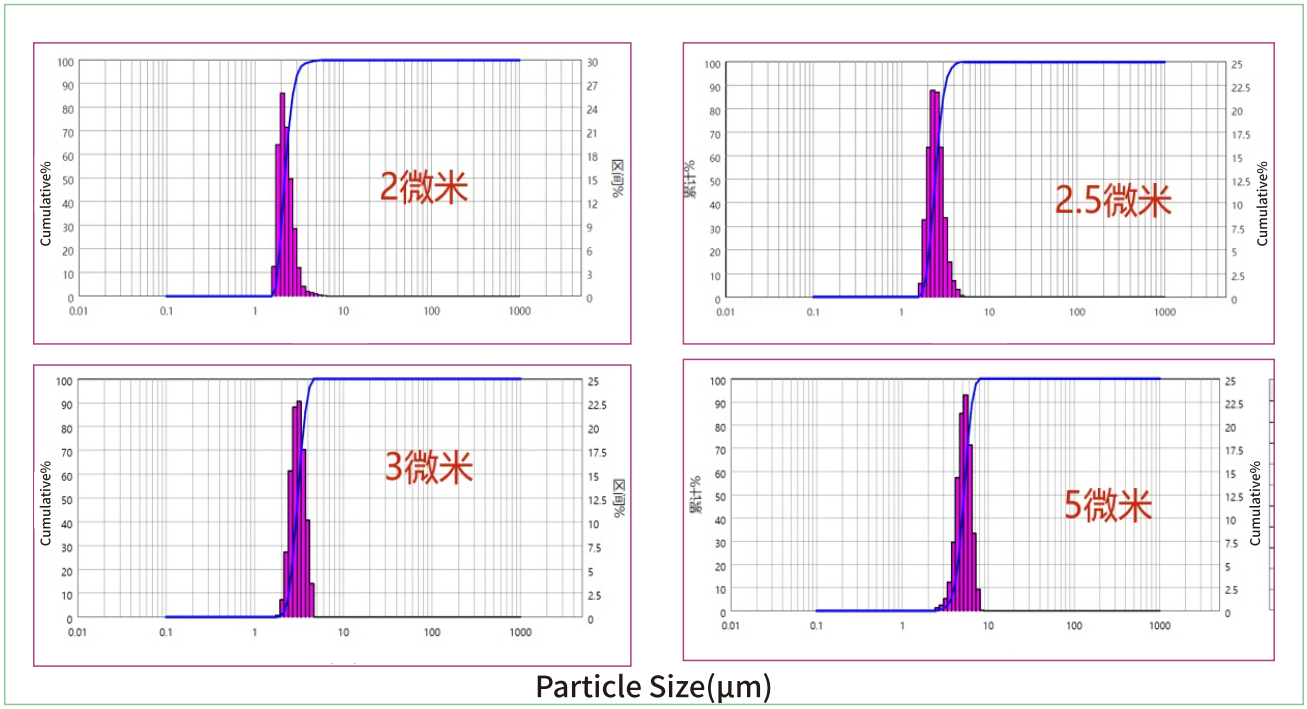
WePure has a 1,950 square meter R&D, production and application development base in the Guangdong Medical Valley National Incubation Park in Nansha District, Guangzhou, China, and a 5,000 square meter production base in a subsidiary of WePure Biotech(Foshan). The Company purchased 40 acres of M3 industrial land in Guangdong Wengyuan Innovative API Industrial Park in December 2023,and is building its own 21,000 square meters production base.

“WePure” production base in Foshan

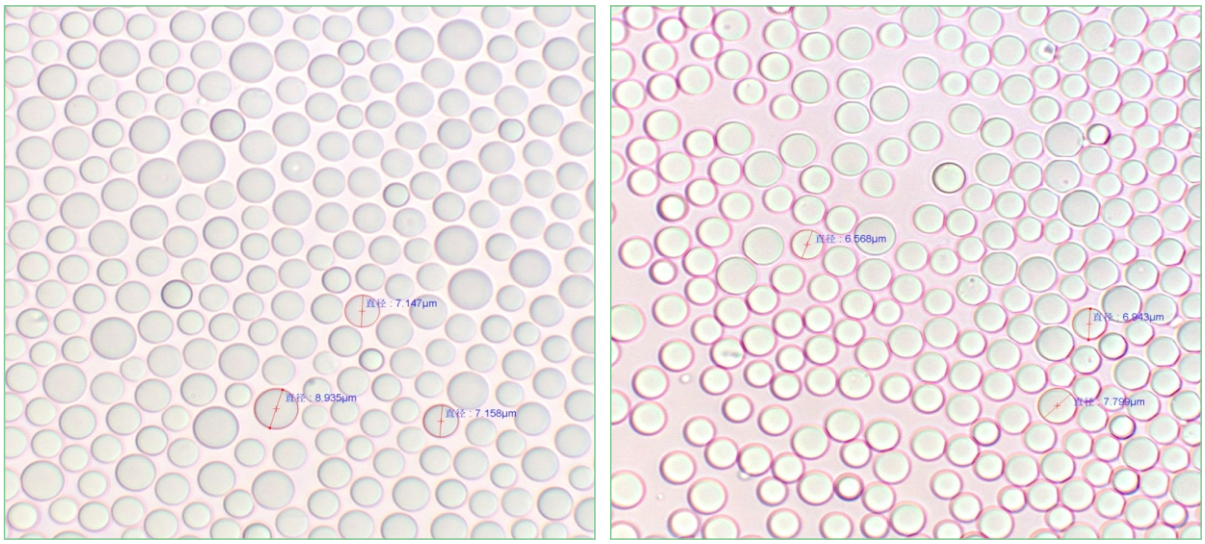
“WePure” production base in Shaoguan Guangdong

The particle size of silica gel is stable from batch to batch, ensure products consistency

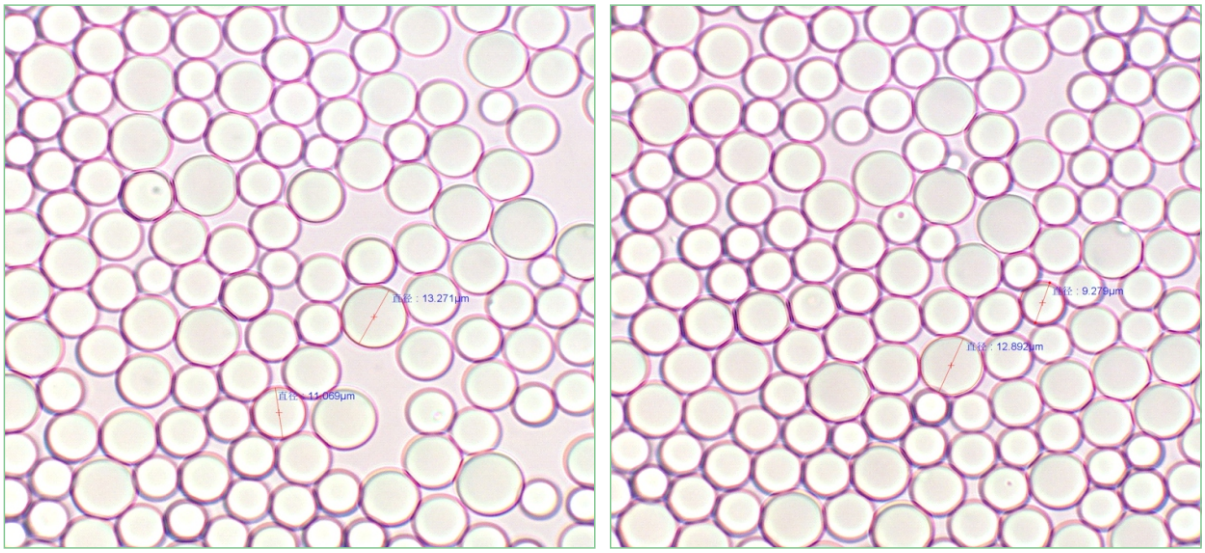




WePure 7μm、10μm Packing Material

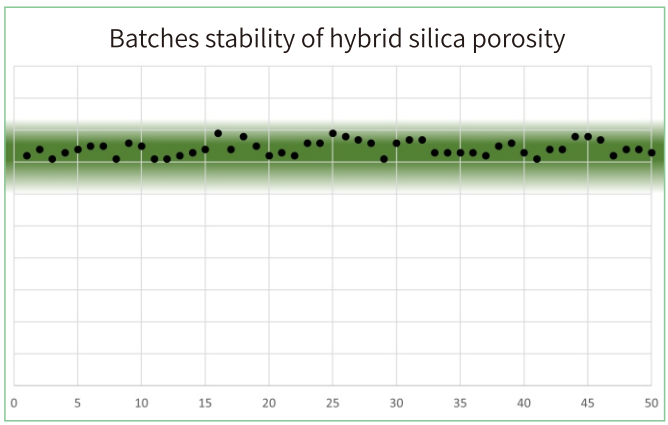


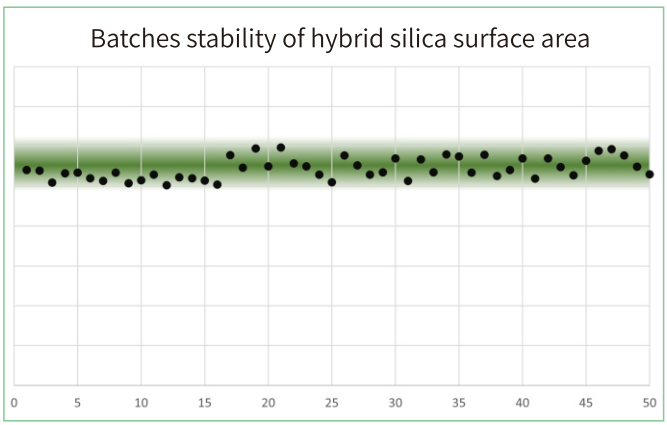
7μm Packing Material



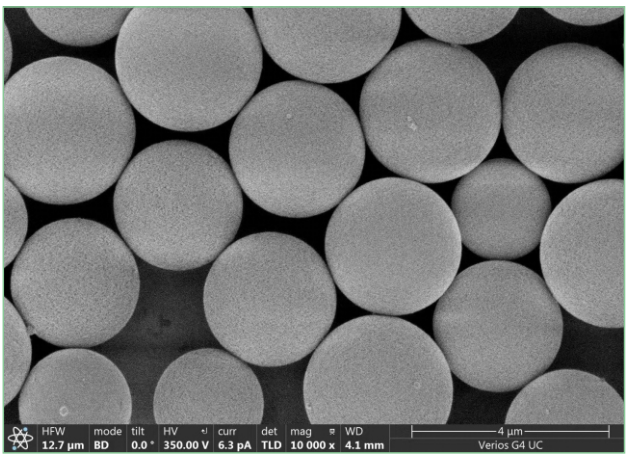
10μm Packing Material

Batches Stability of Porosity and Surface Area

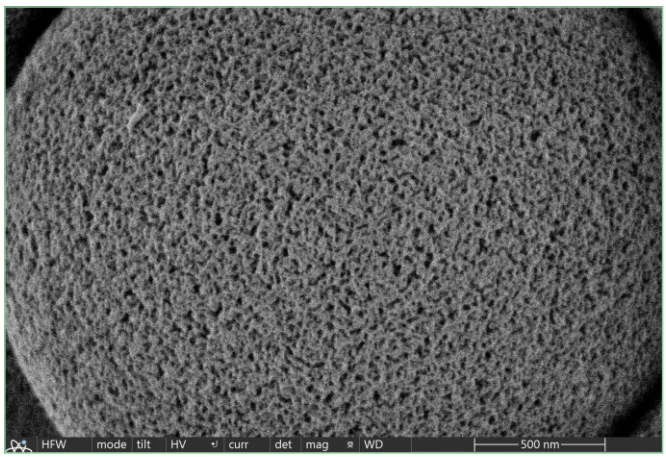




The control of particle size uniformity is a good guarantee of column efficiency



Homogeneous, penetrating pore structure is a good guarantee of chromatographic performance



Type of packing material	Stationary Phase	Specificities
Gold	SIL (L3)	•Porous silica particles •Can enhance the retention of polar compounds ,suitable for analyzing compounds that have no or weak retention on C18 •Can be used in normal-phase
	C18 (L1)	•Octadecyl silane chemicallly bonded to porous silica particles •General ,Cost-effective C18 •Good batch-to-batch stability and reproducibility •Better peak shape for basic compounds,used in pharma,food,environment and other fields
	C8 (L7)	•Octylsilane chemically bonded to totally porous silica particles •General， Cost-effective C8 •Less retentive than C18,suitable for the analysis of compounds with larger molecular weight •Better peak shapes for basic compounds,mainly used in the pharmaceuticals industry
	C4 (L26)	•Butyl silane chemicallly bonded to totally porous silica particles •Less retentive than C18 and C8,different selectivity for larger molecular compound •Analysis large molecular compound,such as proteins
	Phenyl- Hexyl (L11)	•Phenyl groups chemically bonded to porous silica particles •Selectivity different from straight-chain alkane packing material such as C18 or C8 •Different selectivity towards aromatic compounds,amines,and polar compounds
	NH_2 (L8)	•Aminopropylsilane chemically bonded to totally porous silica particles •General NH_2 •Can be used in normal phase and HILIC, and HILIC separate monosaccharides, disaccharides and polysaccharides ,normal phase separate steroids
XP	SIL (L3)	•Unbonded hybrid porous silica particles •SIL used for retention of polar compounds, more robust than silica-based HILIC ,has ideal life •Can be used in normal phase
	tC18 (L1)	•Octadecyl silane chemicallly bonded to porous hybrid silica particles •Unique hybrid structure enhances pH and temperature tolerance,suitable for method development •Incorporates patented trifunctional C18,provide excellent peak shapes •Longer life
	C18 (L1)	•Octadecyl silane chemicallly bonded to porous hybrid silica particles •Unique hybrid structure enhances pH and temperature tolerance
	tC8 (L7)	•Octylsilane chemically bonded to porous hybird silica particles •Stable in pH 1-12 and high temperatures up to 60°C •Trifunctional technology,enhances the resistance of C8 column, have longer life
	C8 (L7)	•Octylsilane chemically bonded to porous hybird silica particles •Stable in pH 1-12 and high temperatures up to 60°C
	tC4 (L26)	•Butyl silane chemicallly bonded to totally porous hybird silica particles •Less retentive than C18 and C8 •Suitable for large molecular such as protein, the hybrid silica offers longer column lifes and better peak shapes
	Phenyl- Hexyl (L11)	•Pheny groups chemically bonded to porous hybird silica particles •Outstanding stability and reproducibility,stable in pH 1-12 •Selectivity different from straight-chain alkane packing material such as C18 or C8 •Suitable for aromatic compounds,amines and polar compounds
	NH_2 (L8)	•Aminopropylsilane chemically bonded to totally porous hybird silica particles •Stable in pH 1-9,less bleeding and longer life •Use in normal phase and HILIC

Packing Material Type	Bonded Phase	Particle Size (μm)	Pore Size (Å)	Pore Volume (mL/g)	Surface Area (m^2/g)	End-capped	Carbon Load (wt%)	Packing specification (g/bottle)	Part No
Gold	SIL	5	120	0.9	300	NO	-	300 500 1000 5000	GDS-5-120-300G GDS-5-120-500G GDS-5-120-1000G GDS-5-120-5000G
		7	120	0.9	300	NO	-	300 500 1000 5000	GDS-7-120-300G GDS-7-120-500G GDS-7-120-1000G GDS-7-120-5000G
		10	120	0.9	300	NO	-	300 500 1000 5000	GDS-10-120-300G GDS-10-120-500G GDS-10-120-1000G GDS-10-120-5000G
		15	120	0.9	300	NO	-	300 500 1000 5000	GDS-15-120-300G GDS-15-120-500G GDS-15-120-1000G GDS-15-120-5000G
		20	120	0.9	300	NO	-	300 500 1000 5000	GDS-20-120-300G GDS-20-120-500G GDS-20-120-1000G GDS-20-120-5000G
	C18	5	120	0.9	300	YES	18%	300 500 1000 5000	GDC18-5-120-300G GDC18-5-120-500G GDC18-5-120-1000G GDC18-5-120-5000G
		7	120	0.9	300	YES	18%	300 500 1000 5000	GDC18-7-120-300G GDC18-7-120-500G GDC18-7-120-1000G GDC18-7-120-5000G
		10	120	0.9	300	YES	18%	300 500 1000 5000	GDC18-10-120-300G GDC18-10-120-500G GDC18-10-120-1000G GDC18-10-120-5000G
		15	120	0.9	300	YES	18%	300 500 1000 5000	GDC18-15-120-300G GDC18-15-120-500G GDC18-15-120-1000G GDC18-15-120-5000G
		20	120	0.9	300	YES	18%	300 500 1000 5000	GDC18-20-120-300G GDC18-20-120-500G GDC18-20-120-1000G GDC18-20-120-5000G

Packing Material Type	Bonded Phase	Particle Size (μm)	Pore Size (Å)	Pore Volume (mL/g)	Surface Area (m^2/g)	End-capped	Carbon Load (wt%)	Packing specification (g/bottle)	Part No
Gold	C8	5	120	0.9	300	YES	12%	300 500 1000 5000	GDC08-5-120-300G GDC08-5-120-500G GDC08-5-120-1000G GDC08-5-120-5000G
		7	120	0.9	300	YES	12%	300 500 1000 5000	GDC08-7-120-300G GDC08-7-120-500G GDC08-7-120-1000G GDC08-7-120-5000G
		10	120	0.9	300	YES	12%	300 500 1000 5000	GDC08-10-120-300G GDC08-10-120-500G GDC08-10-120-1000G GDC08-10-120-5000G
		15	120	0.9	300	YES	12%	300 500 1000 5000	GDC08-15-120-300G GDC08-15-120-500G GDC08-15-120-1000G GDC08-15-120-5000G
		20	120	0.9	300	YES	12%	300 500 1000 5000	GDC08-20-120-300G GDC08-20-120-500G GDC08-20-120-1000G GDC08-20-120-5000G
	C4	5	120	0.9	300	YES	3.9%	300 500 1000 5000	GDC04-5-120-300G GDC04-5-120-500G GDC04-5-120-1000G GDC04-5-120-5000G
		7	120	0.9	300	YES	3.9%	300 500 1000 5000	GDC04-7-120-300G GDC04-7-120-500G GDC04-7-120-1000G GDC04-7-120-5000G
		10	120	0.9	300	YES	3.9%	300 500 1000 5000	GDC04-10-120-300G GDC04-10-120-500G GDC04-10-120-1000G GDC04-10-120-5000G
		15	120	0.9	300	YES	3.9%	300 500 1000 5000	GDC04-15-120-300G GDC04-15-120-500G GDC04-15-120-1000G GDC04-15-120-5000G
		20	120	0.9	300	YES	3.9%	300 500 1000 5000	GDC04-20-120-300G GDC04-20-120-500G GDC04-20-120-1000G GDC04-20-120-5000G

Packing Material Type	Bonded Phase	Particle Size (μm)	Pore Size (Å)	Pore Volume (mL/g)	Surface Area (m^2/g)	End-capped	Carbon Load (wt%)	Packing specification (g/bottle)	Part No
Gold	Phenyl -Hexyl	5	120	0.9	300	YES	13%	300 500 1000 5000	GDPH-5-120-300G GDPH-5-120-500G GDPH-5-120-1000G GDPH-5-120-5000G
		7	120	0.9	300	YES	13%	300 500 1000 5000	GDPH-7-120-300G GDPH-7-120-500G GDPH-7-120-1000G GDPH-7-120-5000G
		10	120	0.9	300	YES	13%	300 500 1000 5000	GDPH-10-120-300G GDPH-10-120-500G GDPH-10-120-1000G GDPH-10-120-5000G
		15	120	0.9	300	YES	13%	300 500 1000 5000	GDPH-15-120-300G GDPH-15-120-500G GDPH-15-120-1000G GDPH-15-120-5000G
		20	120	0.9	300	YES	13%	300 500 1000 5000	GDPH-20-120-300G GDPH-20-120-500G GDPH-20-120-1000G GDPH-20-120-5000G
	NH_2	5	120	0.9	300	NO	3.8%	300 500 1000 5000	GDNH-5-120-300G GDNH-5-120-500G GDNH-5-120-1000G GDNH-5-120-5000G
		7	120	0.9	300	NO	3.8%	300 500 1000 5000	GDNH-7-120-300G GDNH-7-120-500G GDNH-7-120-1000G GDNH-7-120-5000G
		10	120	0.9	300	NO	3.8%	300 500 1000 5000	GDNH-10-120-300G GDNH-10-120-500G GDNH-10-120-1000G GDNH-10-120-5000G
		15	120	0.9	300	NO	3.8%	300 500 1000 5000	GDNH-15-120-300G GDNH-15-120-500G GDNH-15-120-1000G GDNH-15-120-5000G
		20	120	0.9	300	NO	3.8%	300 500 1000 5000	GDNH-20-120-300G GDNH-20-120-500G GDNH-20-120-1000G GDNH-20-120-5000G

Packing Material Type	Bonded Phase	Particle Size (μm)	Pore Size (Å)	Pore Volume (mL/g)	Surface Area (m^2/g)	End-capped	Carbon Load (wt%)	Packing specification (g/bottle)	Part No
XP	SIL	5	130	0.7	185	NO	-	300 500 1000 5000	XPS-5-130-300G XPS-5-130-500G XPS-5-130-1000G XPS-5-130-5000G
		7	130	0.7	185	NO	-	300 500 1000 5000	XPS-7-130-300G XPS-7-130-500G XPS-7-130-1000G XPS-7-130-5000G
		10	130	0.7	185	NO	-	300 500 1000 5000	XPS-10-130-300G XPS-10-130-500G XPS-10-130-1000G XPS-10-130-5000G
		15	130	0.7	185	NO	-	300 500 1000 5000	XPS-15-130-300G XPS-15-130-500G XPS-15-130-1000G XPS-15-130-5000G
		20	130	0.7	185	NO	-	300 500 1000 5000	XPS-20-130-300G XPS-20-130-500G XPS-20-130-1000G XPS-20-130-5000G
	C18	5	130	0.7	185	YES	19%	300 500 1000 5000	XPC18-5-130-300G XPC18-5-130-500G XPC18-5-130-1000G XPC18-5-130-5000G
		7	130	0.7	185	YES	19%	300 500 1000 5000	XPC18-7-130-300G XPC18-7-130-500G XPC18-7-130-1000G XPC18-7-130-5000G
		10	130	0.7	185	YES	19%	300 500 1000 5000	XPC18-10-130-300G XPC18-10-130-500G XPC18-10-130-1000G XPC18-10-130-5000G
		15	130	0.7	185	YES	19%	300 500 1000 5000	XPC18-15-130-300G XPC18-15-130-500G XPC18-15-130-1000G XPC18-15-130-5000G
		20	130	0.7	185	YES	19%	300 500 1000 5000	XPC18-20-130-300G XPC18-20-130-500G XPC18-20-130-1000G XPC18-20-130-5000G

Packing Material Type	Bonded Phase	Particle Size (μm)	Pore Size (Å)	Pore Volume (mL/g)	Surface Area (m^2/g)	End-capped	Carbon Load (wt%)	Packing specification (g/bottle)	Part No
XP	tC18	5	130	0.7	185	YES	18%	300 500 1000 5000	XPtC18-5-130-300G XPtC18-5-130-500G XPtC18-5-130-1000G XPtC18-5-130-5000G
		7	130	0.7	185	YES	18%	300 500 1000 5000	XPtC18-7-130-300G XPtC18-7-130-500G XPtC18-7-130-1000G XPtC18-7-130-5000G
		10	130	0.7	185	YES	18%	300 500 1000 5000	XPtC18-10-130-300G XPtC18-10-130-500G XPtC18-10-130-1000G XPtC18-10-130-5000G
		15	130	0.7	185	YES	18%	300 500 1000 5000	XPtC18-15-130-300G XPtC18-15-130-500G XPtC18-15-130-1000G XPtC18-15-130-5000G
		20	130	0.7	185	YES	18%	300 500 1000 5000	XPtC18-20-130-300G XPtC18-20-130-500G XPtC18-20-130-1000G XPtC18-20-130-5000G
	C8	5	130	0.7	185	YES	14%	300 500 1000 5000	XPC08-5-130-300G XPC08-5-130-500G XPC08-5-130-1000G XPC08-5-130-5000G
		7	130	0.7	185	YES	14%	300 500 1000 5000	XPC08-7-130-300G XPC08-7-130-500G XPC08-7-130-1000G XPC08-7-130-5000G
		10	130	0.7	185	YES	14%	300 500 1000 5000	XPC08-10-130-300G XPC08-10-130-500G XPC08-10-130-1000G XPC08-10-130-5000G
		15	130	0.7	185	YES	14%	300 500 1000 5000	XPC08-15-130-300G XPC08-15-130-500G XPC08-15-130-1000G XPC08-15-130-5000G
		20	130	0.7	185	YES	14%	300 500 1000 5000	XPC08-20-130-300G XPC08-20-130-500G XPC08-20-130-1000G XPC08-20-130-5000G

Packing Material Type	Bonded Phase	Particle Size (μm)	Pore Size (Å)	Pore Volume (mL/g)	Surface Area (m^2/g)	End-capped	Carbon Load (wt%)	Packing specification (g/bottle)	Part No
XP	tC8	5	130	0.7	185	YES	13%	300 500 1000 5000	XPtC08-5-130-300G XPtC08-5-130-500G XPtC08-5-130-1000G XPtC08-5-130-5000G
		7	130	0.7	185	YES	13%	300 500 1000 5000	XPtC08-7-130-300G XPtC08-7-130-500G XPtC08-7-130-1000G XPtC08-7-130-5000G
		10	130	0.7	185	YES	13%	300 500 1000 5000	XPtC08-10-130-300G XPtC08-10-130-500G XPtC08-10-130-1000G XPtC08-10-130-5000G
		15	130	0.7	185	YES	13%	300 500 1000 5000	XPtC08-15-130-300G XPtC08-15-130-500G XPtC08-15-130-1000G XPtC08-15-130-5000G
		20	130	0.7	185	YES	13%	300 500 1000 5000	XPtC08-20-130-300G XPtC08-20-130-500G XPtC08-20-130-1000G XPtC08-20-130-5000G
	tC4	5	130	0.7	185	YES	9.5%	300 500 1000 5000	XPC04-5-130-300G XPC04-5-130-500G XPC04-5-130-1000G XPC04-5-130-5000G
		7	130	0.7	185	YES	9.5%	300 500 1000 5000	XPC04-7-130-300G XPC04-7-130-500G XPC04-7-130-1000G XPC04-7-130-5000G
		10	130	0.7	185	YES	9.5%	300 500 1000 5000	XPC04-10-130-300G XPC04-10-130-500G XPC04-10-130-1000G XPC04-10-130-5000G
		15	130	0.7	185	YES	9.5%	300 500 1000 5000	XPC04-15-130-300G XPC04-15-130-500G XPC04-15-130-1000G XPC04-15-130-5000G
		20	130	0.7	185	YES	9.5%	300 500 1000 5000	XPC04-20-130-300G XPC04-20-130-500G XPC04-20-130-1000G XPC04-20-130-5000G

Packing Material Type	Bonded Phase	Particle Size (μm)	Pore Size (Å)	Pore Volume (mL/g)	Surface Area (m^2/g)	End-capped	Carbon Load (wt%)	Packing specification (g/bottle)	Part No
XP	Phenyl - Hexyl	5	130	0.7	185	YES	15%	300 500 1000 5000	XPPH-5-130-300G XPPH-5-130-500G XPPH-5-130-1000G XPPH-5-130-5000G
		7	130	0.7	185	YES	15%	300 500 1000 5000	XPPH-7-130-300G XPPH-7-130-500G XPPH-7-130-1000G XPPH-7-130-5000G
		10	130	0.7	185	YES	15%	300 500 1000 5000	XPPH-10-130-300G XPPH-10-130-500G XPPH-10-130-1000G XPPH-10-130-5000G
		15	130	0.7	185	YES	15%	300 500 1000 5000	XPPH-15-130-300G XPPH-15-130-500G XPPH-15-130-1000G XPPH-15-130-5000G
		20	130	0.7	185	YES	15%	300 500 1000 5000	XPPH-20-130-300G XPPH-20-130-500G XPPH-20-130-1000G XPPH-20-130-5000G
	NH_2	5	130	0.7	185	NO	9%	300 500 1000 5000	XPNH-5-130-300G XPNH-5-130-500G XPNH-5-130-1000G XPNH-5-130-5000G
		7	130	0.7	185	NO	9%	300 500 1000 5000	XPNH-7-130-300G XPNH-7-130-500G XPNH-7-130-1000G XPNH-7-130-5000G
		10	130	0.7	185	NO	9%	300 500 1000 5000	XPNH-10-130-300G XPNH-10-130-500G XPNH-10-130-1000G XPNH-10-130-5000G
		15	130	0.7	185	NO	9%	300 500 1000 5000	XPNH-15-130-300G XPNH-15-130-500G XPNH-15-130-1000G XPNH-15-130-5000G
		20	130	0.7	185	NO	9%	300 500 1000 5000	XPNH-20-130-300G XPNH-20-130-500G XPNH-20-130-1000G XPNH-20-130-5000G

Case：Insulin Purification

Packing Material： PrePulite® XP C18 10μm

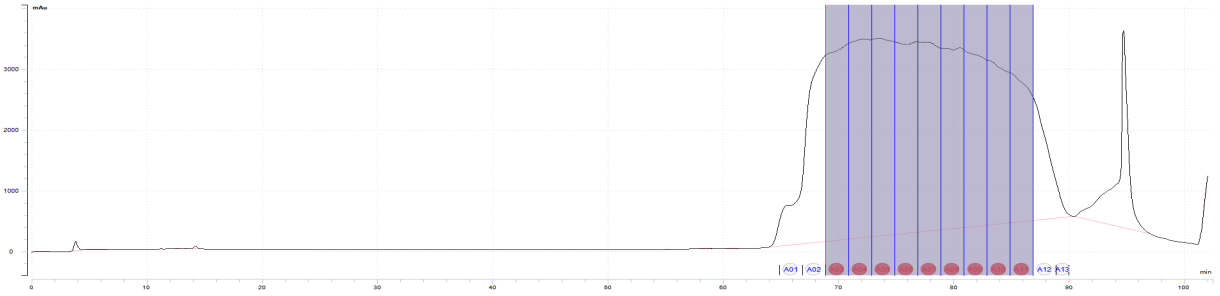
Loading Capacity：8g/L

Purity of crude product：97.31%

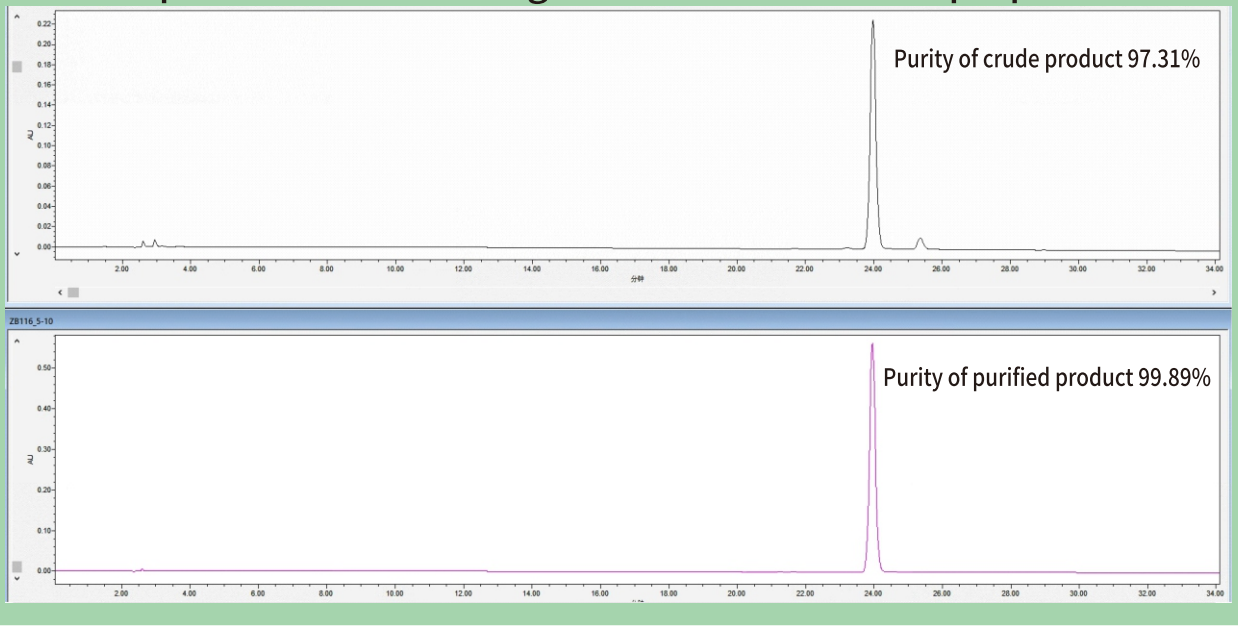
Purity of purified product：99.89%

Largest single impurity：0.09%

Total Recovery Rate：87.83%



Comparison of chromatograms before and after preparation



Case: GLP-1 drug purification

Fermentation synthesis of Semaglutide

Packing Material：PrePulite® XP C8 10μm

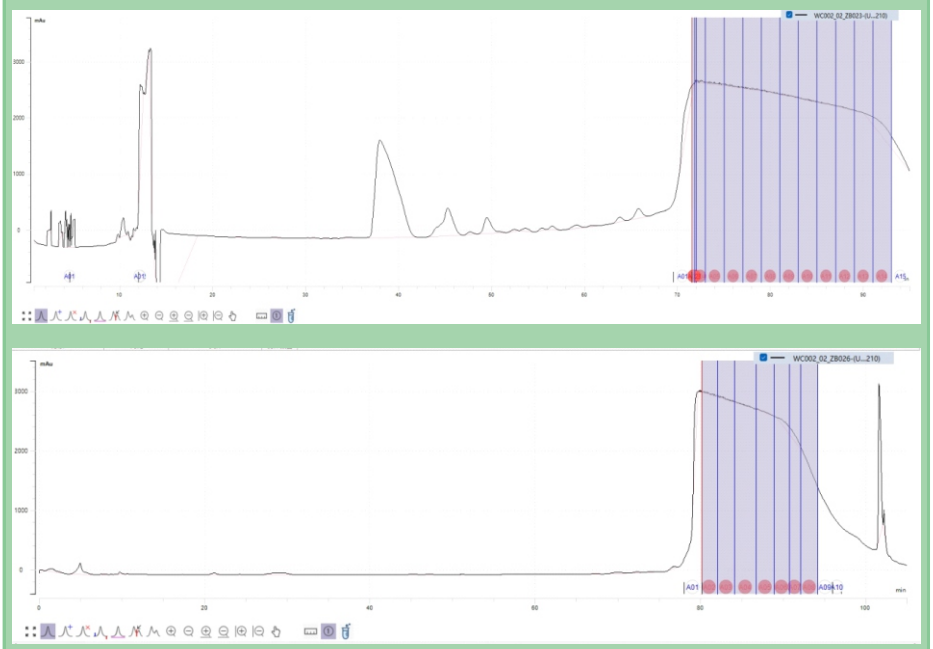
Loading Capacity：10g/L

Purity of crude product：85.49%

Purity of purified product：99.81%

Largest single impurity：0.07%

Total purification yield：68.63%



Fully chemically synthesized Semaglutide

Packing Material：PrePulite® XP C8 10μm

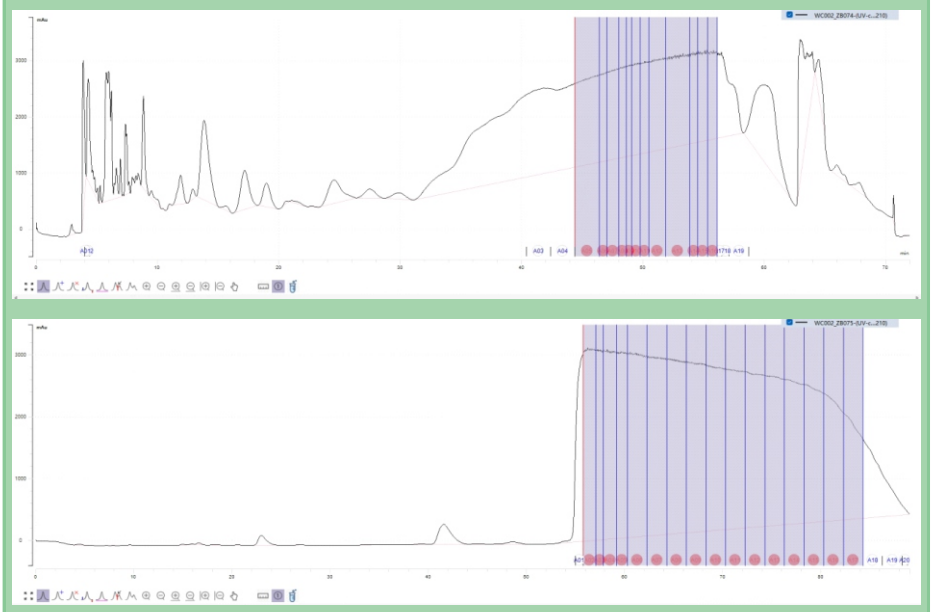
Loading Capacity：8g/L

Purity of crude product：73.25%

Purity of purified product：99.72%

Largest single impurity：0.09%

Total purification yield：60%



ISO 9001 Certificate of WePure Biotech

ISO 9001

The Certificate Of
Quality Management System

Certificate No. : 04922Q01827R0S

WePure Biotech (Guangzhou) Co., Ltd.

Address: 9/F, Building 9 (Building 7 #), No.6, Nanjiang 2nd Road, Zhujiang Street, Nansha District, Guangzhou City, Guangdong Province, P.R. China / Unified Social Credit Code: 91440115MABRPFBGXT

According to your organization's application, our company carried out audit and certification in accordance with the requirements for *Quality Management System* (GB/T19001-2016/ISO9001:2015), it accords with the requirements through assessment. The scope of the certified QMS is:

R&D, manufacture and sales of liquid chromatography packing and chromatographic column

Initial date: 2022-12-20
Term of validity of this certificate: 2022-12-20 to 2025-12-19

The scope of the certified should limits within the administrative licensing or China Compulsory Certification. The certified organization shall be subject to annual supervision of CTC during the validity period.The Certificate is only valid with the annual surveillance labels. The certificate related information can be obtained through the national certification and accreditation Information public service platform (http://cx.cnca.cn) or customer service hotline 400-888-2538.

The first surveillance	The second surveillance

中国认可
国际互认
管理体系
MANAGEMENT SYSTEM
CNAS C049-M

Chairman

Guangdong Quality Testing CTC Certification Co., Ltd.

Address: No. 10, Science Avenue, Huangpu District, Guangzhou, Guangdong, China
Tel.: 86-020-89232333 Fax: 86- 020-89232078 Web: www. qtctc. org

“WePure” WeChat Offical

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