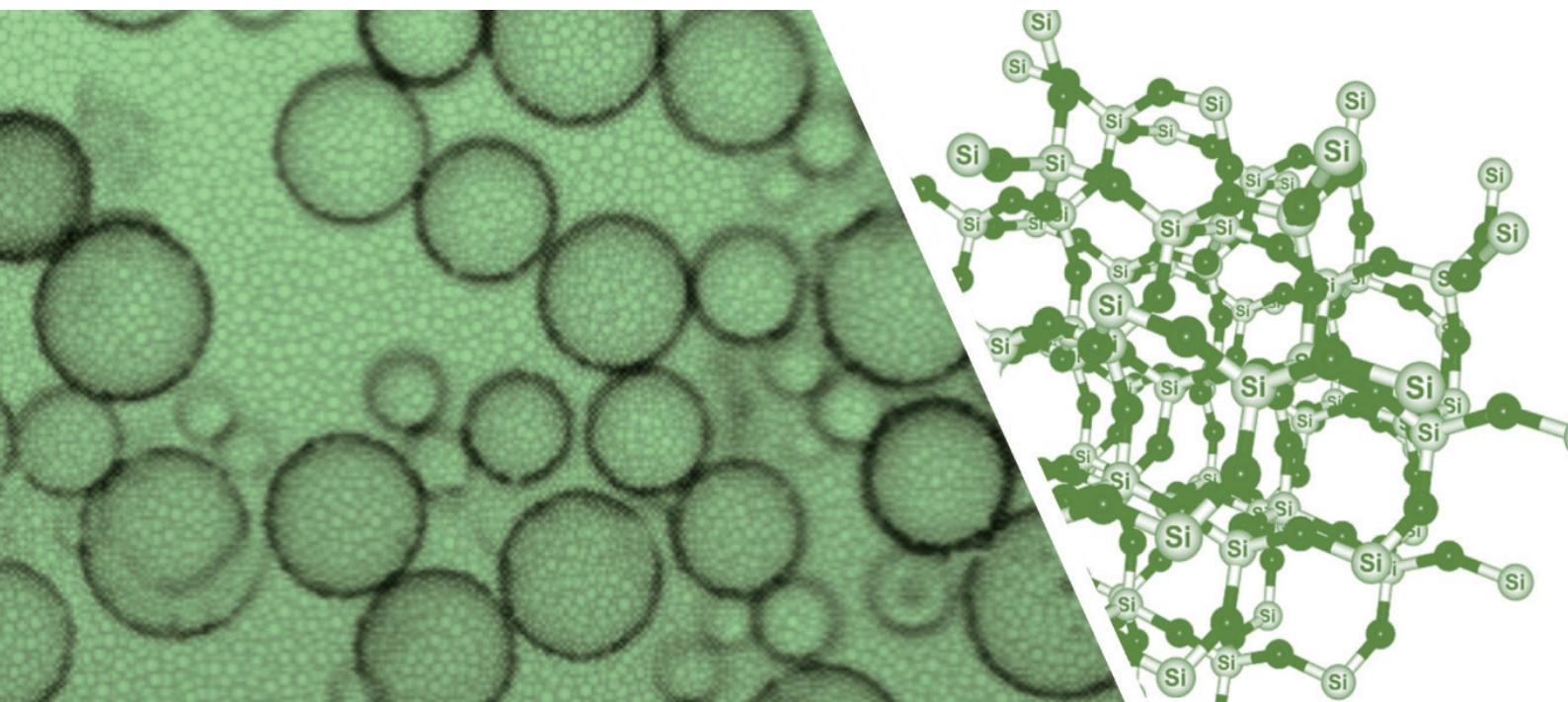




**WE PURE**  
微纯生物科技



**WePure Biotech**  
**Dedicated To UPLC, UHPLC, HPLC Columns**  
**And Packing Media**



“WePure” WeChat Official



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## 公司简介

# COMPANY PROFILE



WePure Biotech is dedicated to the development, production and sales of silica-based and polymer-based porous microspheres, and is one of the few companies worldwide that manufactures silica and polymer packing media for liquid chromatography.

Starting from base microspheres, WePure constructs three core technology platforms, covering microsphere syntheses, particle surface functionalization and column packing, providing high-quality, cost-effective, stable, and fast-supply products and services for customers in the fields of biopharmaceuticals, analytical testing, and other industries.



"WePure" Headquarter located in Guangdong



"WePure" production base in Foshan



"WePure" production base in Shaoguan Guangdong

## WePure Biotech's three technology platforms

1

### Top-notch porous microsphere syntheses technology

WePure offers stable and large-scale production of 1.7  $\mu\text{m}$ -100  $\mu\text{m}$  high-purity Gold silica gel, inorganic-organic structured hybrid XP silica gel and high-strength HSS silica gel series liquid chromatography packing media.

2

### Advanced surface modification technology

WePure provides triple bond C18, double bond C18, single bond C18, triple bond C8, double bond C8, single bond C8, NH<sub>2</sub>, Amide, hexyl benzene, PFP, diol, RPC18, charged PHS, unique T3 and other bonded phases, provides a series of products with rich functions for biopharmaceutical separation and purification and analytical detection.

3

### Cutting-edge columns packing platform

WePure assembles LC columns covering UPLC, UHPLC, HPLC and semi-preparative columns, with stable and mature loading process and testing, ensuring excellent stability and reproducibility of liquid chromatography columns.

## MicroPulite® Gold Series: Preferred choice for high cost performance LC columns

Columns are packed with WePure Gold series packing media under ISO 9001 to ensure excellent peak shape with outstanding batch-to-batch stability and reproducibility, making them preferred columns for method development under non-extreme chromatographic conditions.

- Sharp peak and extremely high column efficiency
- Common chromatographic column with good column and batch reproducibility
- Wide pH tolerance range: 2–8
- Generally applied in the field of biomedicine, environment and food safety testing

Stationary Phase	Bonded Phase	Carbon Percentage	Pore Size	Particle Size	USP classification	pH range	The upper limit of temperature
Gold C18		18%	120Å	3, 3.5, 5, 7, 10µm	L1	2-8	60°C (Low pH) 40°C (High pH)
Gold C8		12%	120Å	3, 3.5, 5, 7, 10µm	L7	2-8	60°C (Low pH) 40°C (High pH)
Gold C4		3.9%	120Å	3, 3.5, 5, 7, 10µm	L26	2-8	60°C (Low pH) 40°C (High pH)
Gold RP C18		17%	130Å	3, 3.5, 5, 7, 10µm	L1	1-8	60°C (Low pH) 40°C (High pH)
Gold RP18 plus		17%	120Å	3, 3.5, 5µm	L1	2-8	60°C (Low pH) 40°C (High pH)
Gold RP8 plus		15%	120Å	3, 3.5, 5µm	L7	2-8	60°C (Low pH) 40°C (High pH)
Gold RP4 plus		3.9%	120Å	3, 3.5, 5µm	L26	2-8	60°C (Low pH) 40°C (High pH)
Gold NH <sub>2</sub>		4%	120Å	3.5, 5µm	L8	2-8	60°C (Low pH) 40°C (High pH)
Gold HILIC		-	120Å	3, 3.5, 5µm	L3	2-7	60°C (Low pH) 40°C (High pH)
Gold Phenyl-Hexyl		13.5%	120Å	3, 3.5, 5µm	L11	2-8	60°C (Low pH) 40°C (High pH)
Gold PFP		10%	120Å	3, 3.5, 5µm	L43	2-8	60°C (Low pH) 40°C (High pH)

### Application case

#### Sodium lauroylsarcosinate

##### Chromatographic conditions:

Flow rate=1.0mL/min

Injection volume: 10µL

Wavelength: 200nm

Column temperature=RT

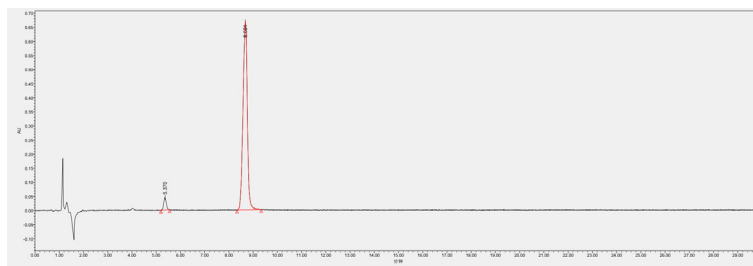
Mobile phase:water(0.1%TFA): acetonitrile

Sample preparation: 1mL of the sample was placed in a 100mL volumetric flask and shaken with water

Column: Gold C18 4.6\*150mm 5µm

Instrument: Waters2695-2998

Column pressure: 1127psi



t(min)	Water(0.1%TFA)	Acetonitrile
0	45	55
30	45	55

	Retention time	Area	Area percentage	Height	USP resolution	USP tailing	USP theoretical plate numbers
1	5.370	331169	3.84	44793	-	9.816306e-001	1.320884e+004
2	8.681	8297718	96.16	666816	1.248973e+001	9.496965e-001	1.150231e+004



## MicroPulite® Gold C18 Ordering information

Particle Size: 3 µm		Particle Size: 3.5 µm		Particle Size: 5 µm	
Size	Item No	Size	Item No	Size	Item No
30 x 2.1 mm	GDC18-032130	30 x 2.1 mm	GDC18-032135	30 x 2.1 mm	GDC18-032150
50 x 2.1 mm	GDC18-052130	50 x 2.1 mm	GDC18-052135	50 x 2.1 mm	GDC18-052150
100 x 2.1 mm	GDC18-102130	100 x 2.1 mm	GDC18-102135	100 x 2.1 mm	GDC18-102150
150 x 2.1 mm	GDC18-152130	150 x 2.1 mm	GDC18-152135	150 x 2.1 mm	GDC18-152150
30 x 3.0 mm	GDC18-033030	30 x 3.0 mm	GDC18-033035	30 x 3.0 mm	GDC18-033050
50 x 3.0 mm	GDC18-053030	50 x 3.0 mm	GDC18-053035	50 x 3.0 mm	GDC18-053050
100 x 3.0 mm	GDC18-103030	100 x 3.0 mm	GDC18-103035	100 x 3.0 mm	GDC18-103050
150 x 3.0 mm	GDC18-153030	150 x 3.0 mm	GDC18-153035	150 x 3.0 mm	GDC18-153050
250 x 3.0 mm	GDC18-253030	250 x 3.0 mm	GDC18-253035	250 x 3.0 mm	GDC18-253050
30 x 4.6 mm	GDC18-034630	30 x 4.6 mm	GDC18-034635	30 x 4.6 mm	GDC18-034650
50 x 4.6 mm	GDC18-054630	50 x 4.6 mm	GDC18-054635	50 x 4.6 mm	GDC18-054650
100 x 4.6 mm	GDC18-104630	100 x 4.6 mm	GDC18-104635	100 x 4.6 mm	GDC18-104650
150 x 4.6 mm	GDC18-154630	150 x 4.6 mm	GDC18-154635	150 x 4.6 mm	GDC18-154650
250 x 4.6 mm	GDC18-254630	250 x 4.6 mm	GDC18-254635	250 x 4.6 mm	GDC18-254650

Particle Size: 5 µm		Particle Size: 7 µm		Particle Size: 10 µm	
Size	Item No	Size	Item No	Size	Item No
150 x 10 mm	GDC18-1510050	150 x 10 mm	GDC18-1510070	150 x 10 mm	GDC18-15100100
250 x 10 mm	GDC18-2510050	250 x 10 mm	GDC18-2510070	250 x 10 mm	GDC18-25100100
100 x 20 mm	GDC18-1020050	100 x 20 mm	GDC18-1020070	100 x 20 mm	GDC18-10200100
150 x 20 mm	GDC18-1520050	150 x 20 mm	GDC18-1520070	150 x 20 mm	GDC18-15200100
250 x 20 mm	GDC18-2520050	250 x 20 mm	GDC18-2520070	250 x 20 mm	GDC18-25200100
100 x 30 mm	GDC18-1030050	100 x 30 mm	GDC18-1030070	100 x 30 mm	GDC18-10300100
150 x 30 mm	GDC18-1530050	150 x 30 mm	GDC18-1530070	150 x 30 mm	GDC18-15300100
250 x 30 mm	GDC18-2530050	250 x 30 mm	GDC18-2530070	250 x 30 mm	GDC18-25300100
100 x 50 mm	GDC18-1050050	100 x 50 mm	GDC18-1050070	100 x 50 mm	GDC18-10500100
150 x 50 mm	GDC18-1550050	150 x 50 mm	GDC18-1550070	150 x 50 mm	GDC18-15500100
250 x 50 mm	GDC18-2550050	250 x 50 mm	GDC18-2550070	250 x 50 mm	GDC18-25500100

## MicroPulite® Gold C8 Ordering information

Particle Size: 3 µm		Particle Size: 3.5 µm		Particle Size: 5 µm	
Size	Item No	Size	Item No	Size	Item No
30 x 2.1 mm	GDC08-032130	30 x 2.1 mm	GDC08-032135	30 x 2.1 mm	GDC08-032150
50 x 2.1 mm	GDC08-052130	50 x 2.1 mm	GDC08-052135	50 x 2.1 mm	GDC08-052150
100 x 2.1 mm	GDC08-102130	100 x 2.1 mm	GDC08-102135	100 x 2.1 mm	GDC08-102150
150 x 2.1 mm	GDC08-152130	150 x 2.1 mm	GDC08-152135	150 x 2.1 mm	GDC08-152150
30 x 3.0 mm	GDC08-033030	30 x 3.0 mm	GDC08-033035	30 x 3.0 mm	GDC08-033050
50 x 3.0 mm	GDC08-053030	50 x 3.0 mm	GDC08-053035	50 x 3.0 mm	GDC08-053050
100 x 3.0 mm	GDC08-103030	100 x 3.0 mm	GDC08-103035	100 x 3.0 mm	GDC08-103050
150 x 3.0 mm	GDC08-153030	150 x 3.0 mm	GDC08-153035	150 x 3.0 mm	GDC08-153050
250 x 3.0 mm	GDC08-253030	250 x 3.0 mm	GDC08-253035	250 x 3.0 mm	GDC08-253050
30 x 4.6 mm	GDC08-034630	30 x 4.6 mm	GDC08-034635	30 x 4.6 mm	GDC08-034650
50 x 4.6 mm	GDC08-054630	50 x 4.6 mm	GDC08-054635	50 x 4.6 mm	GDC08-054650
100 x 4.6 mm	GDC08-104630	100 x 4.6 mm	GDC08-104635	100 x 4.6 mm	GDC08-104650
150 x 4.6 mm	GDC08-154630	150 x 4.6 mm	GDC08-154635	150 x 4.6 mm	GDC08-154650
250 x 4.6 mm	GDC08-254630	250 x 4.6 mm	GDC08-254635	250 x 4.6 mm	GDC08-254650

Particle Size: 5 µm		Particle Size: 7 µm		Particle Size: 10 µm	
Size	Item No	Size	Item No	Size	Item No
150 x 10 mm	GDC08-1510050	150 x 10 mm	GDC08-1510070	150 x 10 mm	GDC08-15100100
250 x 10 mm	GDC08-2510050	250 x 10 mm	GDC08-2510070	250 x 10 mm	GDC08-25100100
100 x 20 mm	GDC08-1020050	100 x 20 mm	GDC08-1020070	100 x 20 mm	GDC08-10200100
150 x 20 mm	GDC08-1520050	150 x 20 mm	GDC08-1520070	150 x 20 mm	GDC08-15200100
250 x 20 mm	GDC08-2520050	250 x 20 mm	GDC08-2520070	250 x 20 mm	GDC08-25200100
100 x 30 mm	GDC08-1030050	100 x 30 mm	GDC08-1030070	100 x 30 mm	GDC08-10300100
150 x 30 mm	GDC08-1530050	150 x 30 mm	GDC08-1530070	150 x 30 mm	GDC08-15300100
250 x 30 mm	GDC08-2530050	250 x 30 mm	GDC08-2530070	250 x 30 mm	GDC08-25300100
100 x 50 mm	GDC08-1050050	100 x 50 mm	GDC08-1050070	100 x 50 mm	GDC08-10500100
150 x 50 mm	GDC08-1550050	150 x 50 mm	GDC08-1550070	150 x 50 mm	GDC08-15500100
250 x 50 mm	GDC08-2550050	250 x 50 mm	GDC08-2550070	250 x 50 mm	GDC08-25500100

## MicroPulite® Gold C4 Ordering information

Particle Size: 3 µm		Particle Size: 3.5 µm		Particle Size: 5 µm	
Size	Item No	Size	Item No	Size	Item No
30 x 2.1 mm	GDC04-032130	30 x 2.1 mm	GDC04-032135	30 x 2.1 mm	GDC04-032150
50 x 2.1 mm	GDC04-052130	50 x 2.1 mm	GDC04-052135	50 x 2.1 mm	GDC04-052150
100 x 2.1 mm	GDC04-102130	100 x 2.1 mm	GDC04-102135	100 x 2.1 mm	GDC04-102150
150 x 2.1 mm	GDC04-152130	150 x 2.1 mm	GDC04-152135	150 x 2.1 mm	GDC04-152150
30 x 3.0 mm	GDC04-033030	30 x 3.0 mm	GDC04-033035	30 x 3.0 mm	GDC04-033050
50 x 3.0 mm	GDC04-053030	50 x 3.0 mm	GDC04-053035	50 x 3.0 mm	GDC04-053050
100 x 3.0 mm	GDC04-103030	100 x 3.0 mm	GDC04-103035	100 x 3.0 mm	GDC04-103050
150 x 3.0 mm	GDC04-153030	150 x 3.0 mm	GDC04-153035	150 x 3.0 mm	GDC04-153050
250 x 3.0 mm	GDC04-253030	250 x 3.0 mm	GDC04-253035	250 x 3.0 mm	GDC04-253050
30 x 4.6 mm	GDC04-034630	30 x 4.6 mm	GDC04-034635	30 x 4.6 mm	GDC04-034650
50 x 4.6 mm	GDC04-054630	50 x 4.6 mm	GDC04-054635	50 x 4.6 mm	GDC04-054650
100 x 4.6 mm	GDC04-104630	100 x 4.6 mm	GDC04-104635	100 x 4.6 mm	GDC04-104650
150 x 4.6 mm	GDC04-154630	150 x 4.6 mm	GDC04-154635	150x 4.6 mm	GDC04-154650
250 x 4.6 mm	GDC04-254630	250 x 4.6 mm	GDC04-254635	250 x 4.6 mm	GDC04-254650

Particle Size: 5 µm		Particle Size: 7µm		Particle Size: 10µm	
Size	Item No	Size	Item No	Size	Item No
150 x 10 mm	GDC04-1510050	150 x 10 mm	GDC04-1510070	150 x 10 mm	GDC04-15100100
250 x 10 mm	GDC04-2510050	250 x 10 mm	GDC04-2510070	250 x 10 mm	GDC04-25100100
100 x 20 mm	GDC04-1020050	100 x 20 mm	GDC04-1020070	100 x 20 mm	GDC04-10200100
150 x 20 mm	GDC04-1520050	150 x 20 mm	GDC04-1520070	150 x 20 mm	GDC04-15200100
250 x 20 mm	GDC04-2520050	250 x 20 mm	GDC04-2520070	250 x 20 mm	GDC04-25200100
100 x 30 mm	GDC04-1030050	100 x 30 mm	GDC04-1030070	100 x 30 mm	GDC04-10300100
150 x 30 mm	GDC04-1530050	150 x 30 mm	GDC04-1530070	150 x 30 mm	GDC04-15300100
250 x 30 mm	GDC04-2530050	250 x 30 mm	GDC04-2530070	250 x 30 mm	GDC04-25300100
100 x 50 mm	GDC04-1050050	100 x 50 mm	GDC04-1050070	100 x 50 mm	GDC04-10500100
150 x 50 mm	GDC04-1550050	150 x 50 mm	GDC04-1550070	150 x 50 mm	GDC04-15500100
250 x 50 mm	GDC04-2550050	250 x 50 mm	GDC04-2550070	250 x 50mm	GDC04-25500100

## MicroPulite® Gold RP C18 Ordering information

Particle Size: 3 µm		Particle Size: 3.5 µm		Particle Size: 5 µm	
Size	Item No	Size	Item No	Size	Item No
30 x 2.1 mm	GDR18-032130	30 x 2.1 mm	GDR18-032135	30 x 2.1 mm	GDR18-032150
50 x 2.1 mm	GDR18-052130	50 x 2.1 mm	GDR18-052135	50 x 2.1 mm	GDR18-052150
100 x 2.1 mm	GDR18-102130	100 x 2.1 mm	GDR18-102135	100 x 2.1 mm	GDR18-102150
150 x 2.1 mm	GDR18-152130	150 x 2.1 mm	GDR18-152135	150 x 2.1 mm	GDR18-152150
30 x 3.0 mm	GDR18-033030	30 x 3.0 mm	GDR18-033035	30 x 3.0 mm	GDR18-033050
50 x 3.0 mm	GDR18-053030	50 x 3.0 mm	GDR18-053035	50 x 3.0 mm	GDR18-053050
100 x 3.0 mm	GDR18-103030	100 x 3.0 mm	GDR18-103035	100 x 3.0 mm	GDR18-103050
150 x 3.0 mm	GDR18-153030	150 x 3.0 mm	GDR18-153035	150 x 3.0 mm	GDR18-153050
250 x 3.0 mm	GDR18-253030	250 x 3.0 mm	GDR18-253035	250 x 3.0 mm	GDR18-253050
30 x 4.6 mm	GDR18-034630	30x 4.6 mm	GDR18-034635	30 x 4.6 mm	GDR18-034650
50 x 4.6 mm	GDR18-054630	50 x 4.6 mm	GDR18-054635	50 x 4.6 mm	GDR18-054650
100 x 4.6 mm	GDR18-104630	100 x 4.6 mm	GDR18-104635	100 x 4.6 mm	GDR18-104650
150 x 4.6 mm	GDR18-154630	150 x 4.6 mm	GDR18-154635	150 x 4.6 mm	GDR18-154650
250 x 4.6 mm	GDR18-254630	250 x 4.6 mm	GDR18-254635	250 x 4.6 mm	GDR18-254650

Particle Size: 5 µm		Particle Size: 7 µm		Particle Size: 10 µm	
Size	Item No	Size	Item No	Size	Item No
150 x 10 mm	GDR18-1510050	150 x 10 mm	GDR18-15100170	150 x 10 mm	GDR18-15100100
250 x 10mm	GDR18-2510050	250 x 10mm	GDR18-25100170	250 x 10mm	GDR18-25100100
100 x 20 mm	GDR18-1020050	100 x 20 mm	GDR18-10200170	100 x 20 mm	GDR18-10200100
150 x 20 mm	GDR18-1520050	150 x 20 mm	GDR18-15200170	150 x 20 mm	GDR18-15200100
250 x 20 mm	GDR18-2520050	250 x 20 mm	GDR18-25200170	250 x 20 mm	GDR18-25200100
100 x 30 mm	GDR18-1030050	100 x 30 mm	GDR18-10300170	100 x 30 mm	GDR18-10300100
150 x 30 mm	GDR18-1530050	150 x 30mm	GDR18-15300170	150 x 30mm	GDR18-15300100
250 x 30mm	GDR18-2530050	250 x 30mm	GDR18-25300170	250 x 30mm	GDR18-25300100
100 x 50mm	GDR18-1050050	100 x 50 mm	GDR18-10500170	100 x 50 mm	GDR18-10500100
150 x 50 mm	GDR18-1550050	150 x 50mm	GDR18-15500170	150 x 50mm	GDR18-15500100
250 x 50mm	GDR18-2550050	250 x 50mm	GDR18-25500170	250 x 50mm	GDR18-25500100



## MicroPulite® Gold RP18 Plus Ordering information

Particle Size: 3 µm	
Size	Item No
30 x 2.1 mm	GDR18P-032130
50 x 2.1 mm	GDR18P-052130
100 x 2.1 mm	GDR18P-102130
150 x 2.1 mm	GDR18P-152130
30 x 3.0 mm	GDR18P-033030
50 x 3.0 mm	GDR18P-053030
100 x 3.0 mm	GDR18P-103030
150 x 3.0 mm	GDR18P-153030
250 x 3.0 mm	GDR18P-253030
30 x 4.6 mm	GDR18P-034630
50 x 4.6 mm	GDR18P-054630
100 x 4.6 mm	GDR18P-104630
150 x 4.6 mm	GDR18P-154630
250 x 4.6 mm	GDR18P-254630

Particle Size: 3.5 µm	
Size	Item No
30 x 21 mm	GDR18P-032135
50 x 21 mm	GDR18P-052135
100 x 2.1 mm	GDR18P-102135
150 x 2.1 mm	GDR18P-152135
30 x 30 mm	GDR18P-033035
50 x 30 mm	GDR18P-053035
100 x 3.0 mm	GDR18P-103035
150 x 3.0 mm	GDR18P-153035
250 x 3.0 mm	GDR18P-253035
30x 46 mm	GDR18P-034635
50 x 46 mm	GDR18P-054635
100 x 4.6 mm	GDR18P-104635
150 x 4.6 mm	GDR18P-154635
250 x 4.6 mm	GDR18P-254635

Particle Size: 5 µm	
Size	Item No
30 x 2.1 mm	GDR18P-032150
50 x 2.1 mm	GDR18P-052150
100 x 2.1 mm	GDR18P-102150
150 x 2.1 mm	GDR18P-152150
30 x 3.0 mm	GDR18P-033050
50 x 3.0 mm	GDR18P-053050
100 x 3.0 mm	GDR18P-103050
150 x 3.0 mm	GDR18P-153050
250 x 3.0 mm	GDR18P-253050
30 x 4.6 mm	GDR18P-034650
50 x 4.6 mm	GDR18P-054650
100 x 4.6 mm	GDR18P-104650
150 x 4.6 mm	GDR18P-154650
250 x 4.6 mm	GDR18P-254650

Particle Size: 5 µm	
Size	Item No
150 x 10 mm	GDR18P-1510050
250 x 10mm	GDR18P-2510050
100 x 20 mm	GDR18P-1020050
150 x 20 mm	GDR18P-1520050
250 x 20 mm	GDR18P-2520050
100 x 30 mm	GDR18P-1030050
150 x 30 mm	GDR18P-1530050
250 x 30mm	GDR18P-2530050
100 x 50mm	GDR18P-1050050
150 x 50 mm	GDR18P-1550050
250 x 50mm	GDR18P-2550050

## MicroPulite® Gold RP8 Plus Ordering information

Particle Size: 3 µm	
Size	Item No
30 x 2.1 mm	GDR08P-032130
50 x 2.1 mm	GDR08P-052130
100 x 2.1 mm	GDR08P-102130
150 x 2.1 mm	GDR08P-152130
30 x 3.0 mm	GDR08P-033030
50 x 3.0 mm	GDR08P-053030
100 x 3.0 mm	GDR08P-103030
150 x 3.0 mm	GDR08P-153030
250 x 3.0 mm	GDR08P-253030
30 x 4.6 mm	GDR08P-034630
50 x 4.6 mm	GDR08P-054630
100 x 4.6 mm	GDR08P-104630
150 x 4.6 mm	GDR08P-154630
250 x 4.6 mm	GDR08P-254630

Particle Size: 3.5 µm	
Size	Item No
30 x 2.1 mm	GDR08P-032135
50 x 2.1 mm	GDR08P-052135
100 x 2.1 mm	GDR08P-102135
150 x 2.1 mm	GDR08P-152135
30 x 3.0 mm	GDR08P-033035
50 x 3.0 mm	GDR08P-053035
100 x 3.0 mm	GDR08P-103035
150 x 3.0 mm	GDR08P-153035
250 x 3.0 mm	GDR08P-253035
30 x 4.6 mm	GDR08P-034635
50 x 4.6 mm	GDR08P-054635
100 x 4.6 mm	GDR08P-104635
150 x 4.6 mm	GDR08P-154635
250 x 4.6 mm	GDR08P-254635

Particle Size: 5 µm	
Size	Item No
30 x 2.1 mm	GDR08P-032150
50 x 2.1 mm	GDR08P-052150
100 x 2.1 mm	GDR08P-102150
150 x 2.1 mm	GDR08P-152150
30 x 3.0 mm	GDR08P-033050
50 x 3.0 mm	GDR08P-053050
100 x 3.0 mm	GDR08P-103050
150 x 3.0 mm	GDR08P-153050
250 x 3.0 mm	GDR08P-253050
30 x 4.6 mm	GDR08P-034650
50 x 4.6 mm	GDR08P-054650
100 x 4.6 mm	GDR08P-104650
150 x 4.6 mm	GDR08P-154650
250 x 4.6 mm	GDR08P-254650

Particle Size: 5 µm	
Size	Item No
150 x 10mm	GDR08P-1510050
250 x 10mm	GDR08P-2510050
100 x 20 mm	GDR08P-1020050
150 x 20 mm	GDR08P-1520050
250 x 20 mm	GDR08P-2520050
100 x 30 mm	GDR08P-1030050
150 x 30mm	GDR08P-1530050
250 x 30mm	GDR08P-2530050
100 x 50 mm	GDR08P-1050050
150 x 50mm	GDR08P-1550050
250 x 50 mm	GDR08P-2550050

## MicroPulite® Gold RP4 Plus Ordering information

Particle Size: 3 µm		Particle Size: 3.5 µm		Particle Size: 5 µm	
Size	Item No	Size	Item No	Size	Item No
30 x 2.1 mm	GDR04P-032130	30 x 2.1 mm	GDR04P-032135	30 x 2.1 mm	GDR04P-032150
50 x 2.1 mm	GDR04P-052130	50 x 2.1 mm	GDR04P-052135	50 x 2.1 mm	GDR04P-052150
100 x 2.1 mm	GDR04P-102130	100 x 2.1 mm	GDR04P-102135	100 x 2.1 mm	GDR04P-102150
150 x 2.1 mm	GDR04P-152130	150 x 2.1 mm	GDR04P-152135	150 x 2.1 mm	GDR04P-152150
30 x 3.0 mm	GDR04P-033030	30 x 3.0 mm	GDR04P-033035	30 x 3.0 mm	GDR04P-033050
50 x 3.0 mm	GDR04P-053030	50 x 3.0 mm	GDR04P-053035	50 x 3.0 mm	GDR04P-053050
100 x 3.0 mm	GDR04P-103030	100 x 3.0 mm	GDR04P-103035	100 x 3.0 mm	GDR04P-103050
150 x 3.0 mm	GDR04P-153030	150 x 3.0 mm	GDR04P-153035	150 x 3.0 mm	GDR04P-153050
250 x 3.0 mm	GDR04P-253030	250 x 3.0 mm	GDR04P-253035	250 x 3.0 mm	GDR04P-253050
30 x 4.6 mm	GDR04P-034630	30 x 4.6 mm	GDR04P-034635	30 x 4.6 mm	GDR04P-034650
50 x 4.6 mm	GDR04P-054630	50 x 4.6 mm	GDR04P-054635	50 x 4.6 mm	GDR04P-054650
100 x 4.6 mm	GDR04P-104630	100 x 4.6 mm	GDR04P-104635	100 x 4.6 mm	GDR04P-104650
150 x 4.6 mm	GDR04P-154630	150 x 4.6 mm	GDR04P-154635	150 x 4.6 mm	GDR04P-154650
250 x 4.6 mm	GDR04P-254630	250 x 4.6 mm	GDR04P-254635	250 x 4.6 mm	GDR04P-254650

Particle Size: 5 µm	
Size	Item No
150 x 10mm	GDR04P-1510050
250 x 10mm	GDR04P-2510050
100 x 20 mm	GDR04P-1020050
150 x 20 mm	GDR04P-1520050
250 x 20 mm	GDR04P-2520050
100 x 30 mm	GDR04P-1030050
150 x 30mm	GDR04P-1530050
250 x 30mm	GDR04P-2530050
100 x 50 mm	GDR04P-1050050
150 x 50mm	GDR04P-1550050
250 x 50 mm	GDR04P-2550050

## MicroPulite® Gold NH<sub>2</sub> Ordering information

Particle Size: 3.5 µm		Particle Size: 5 µm		Particle Size: 5 µm	
Size	Item No	Size	Item No	Size	Item No
30x 2.1 mm	GDNH-032135	30 x 2.1 mm	GDNH-032150	150 x 10mm	GDNH-1510050
50x 2.1 mm	GDNH-052135	50 x 2.1 mm	GDNH-052150	250 x 10mm	GDNH-2510050
100 x 2.1 mm	GDNH-102135	100 x 2.1 mm	GDNH-102150	100 x 20mm	GDNH-1020050
150 x 2.1 mm	GDNH-152135	150 x 2.1 mm	GDNH-152150	150 x 20mm	GDNH-1520050
30x3.0 mm	GDNH-033035	30 x 3.0 mm	GDNH-033050	250 x 20mm	GDNH-2520050
50 x 3.0 mm	GDNH-053035	50 x 3.0 mm	GDNH-053050	100x 30 mm	GDNH-1030050
100 x 3.0 mm	GDNH-103035	100 x 3.0 mm	GDNH-103050	150 x 30mm	GDNH-1530050
150 x 3.0 mm	GDNH-153035	150 x 3.0 mm	GDNH-153050	250 x 30mm	GDNH-2530050
250 x 3.0 mm	GDNH-253035	250 x 3.0 mm	GDNH-253050	100 x 50mm	GDNH-1050050
30x 4.6 mm	GDNH-034635	30 x 4.6 mm	GDNH-034650	150 x 50mm	GDNH-1550050
50x 4.6 mm	GDNH-054635	50 x 4.6 mm	GDNH-054650	250 x 50mm	GDNH-2550050
100 x 4.6 mm	GDNH-104635	100 x 4.6 mm	GDNH-104650		
150 x 4.6 mm	GDNH-154635	150 x 4.6 mm	GDNH-154650		
250 x 4.6 mm	GDNH-254635	250 x 4.6 mm	GDNH-254650		

## MicroPulite® Gold HILIC Ordering information

Particle Size: 3 µm	
Size	Item No
30 x 2.1 mm	GDH-032130
50 x 2.1 mm	GDH-052130
100 x 2.1 mm	GDH-102130
150 x 2.1 mm	GDH-152130
30 x 3.0 mm	GDH-033030
50 x 3.0 mm	GDH-053030
100 x 3.0 mm	GDH-103030
150 x 3.0 mm	GDH-153030
250 x 3.0 mm	GDH-253030
30 x 4.6 mm	GDH-034630
50 x 4.6 mm	GDH-054630
100 x 4.6 mm	GDH-104630
150 x 4.6 mm	GDH-154630
250 x 4.6 mm	GDH-254630

Particle Size: 3.5 µm	
Size	Item No
30 x 2.1 mm	GDH-032135
50 x 2.1 mm	GDH-052135
100 x 2.1 mm	GDH-102135
150 x 2.1 mm	GDH-152135
30 x 3.0 mm	GDH-033035
50 x 3.0 mm	GDH-053035
100 x 3.0 mm	GDH-103035
150 x 3.0 mm	GDH-153035
250 x 3.0 mm	GDH-253035
30 x 4.6 mm	GDH-034635
50 x 4.6 mm	GDH-054635
100 x 4.6 mm	GDH-104635
150 x 4.6 mm	GDH-154635
250 x 4.6 mm	GDH-254635

Particle Size: 5 µm	
Size	Item No
30 x 2.1 mm	GDH-032150
50 x 2.1 mm	GDH-052150
100 x 2.1 mm	GDH-102150
150 x 2.1 mm	GDH-152150
30 x 3.0 mm	GDH-033050
50 x 3.0 mm	GDH-053050
100 x 3.0 mm	GDH-103050
150 x 3.0 mm	GDH-153050
250 x 3.0 mm	GDH-253050
30 x 4.6 mm	GDH-034650
50 x 4.6 mm	GDH-054650
100 x 4.6 mm	GDH-104650
150 x 4.6 mm	GDH-154650
250 x 4.6 mm	GDH-254650

Particle Size: 5 µm	
Size	Item No
150 x 10mm	GDH-1510050
250 x 10mm	GDH-2510050
100 x 20mm	GDH-1020050
150 x 20mm	GDH-1520050
250 x 20 mm	GDH-2520050
100 x 30 mm	GDH-1030050
150 x 30mm	GDH-1530050
250 x 30mm	GDH-2530050
100 x 50 mm	GDH-1050050
150 x 50mm	GDH-1550050
250 x 50mm	GDH-2550050

## MicroPulite® Gold Phenyl- Hexyl Ordering information

Particle Size: 3 µm	
Size	Item No
30 x2.1 mm	GDPH-032130
50 x 2.1 mm	GDPH-052130
100 x 2.1 mm	GDPH-102130
150 x2.1 mm	GDPH-152130
30 x3.0 mm	GDPH-033030
50 x3.0 mm	GDPH-053030
100x3.0 mm	GDPH-103030
150 x3.0 mm	GDPH-153030
250 x3.0 mm	GDPH-253030
30 x 4.6 mm	GDPH-034630
50 x 4.6 mm	GDPH-054630
100 x 4.6 mm	GDPH-104630
150 x 4.6 mm	GDPH-154630
250 x 4.6 mm	GDPH-254630

Particle Size: 3.5 µm	
Size	Item No
30x 2.1 mm	GDPH-032135
50x 2.1 mm	GDPH-052135
100 x 2.1 mm	GDPH-102135
150 x 2.1 mm	GDPH-152135
30x3.0 mm	GDPH-033035
50 x 3.0 mm	GDPH-053035
100 x 3.0 mm	GDPH-103035
150 x 3.0 mm	GDPH-153035
250 x 3.0 mm	GDPH-253035
30x 4.6 mm	GDPH-034635
50x 4.6 mm	GDPH-054635
100 x 4.6 mm	GDPH-104635
150 x 4.6 mm	GDPH-154635
250 x 4.6 mm	GDPH-254635

Particle Size: 5 µm	
Size	Item No
30 x 2.1 mm	GDPH-032150
50 x 2.1 mm	GDPH-052150
100 x 2.1 mm	GDPH-102150
150 x 2.1 mm	GDPH-152150
30 x 3.0 mm	GDPH-033050
50 x 3.0 mm	GDPH-053050
100 x 3.0 mm	GDPH-103050
150 x 3.0 mm	GDPH-153050
250 x 3.0 mm	GDPH-253050
30 x 4.6 mm	GDPH-034650
50 x 4.6 mm	GDPH-054650
100 x 4.6 mm	GDPH-104650
150 x 4.6 mm	GDPH-154650
250 x 4.6 mm	GDPH-254650

Particle Size: 5 µm	
Size	Item No
150 x 10mm	GDPH-1510050
250 x 10mm	GDPH-2510050
100 x 20mm	GDPH-1020050
150 x 20mm	GDPH-1520050
250 x 20mm	GDPH-2520050
100x 30 mm	GDPH-1030050
150 x 30mm	GDPH-1530050
250 x 30mm	GDPH-2530050
100 x 50mm	GDPH-1050050
150 x 50mm	GDPH-1550050
250 x 50mm	GDPH-2550050

## MicroPulite® Gold PFP Ordering information

Particle Size: 3 µm		Particle Size: 3.5 µm		Particle Size: 5 µm	
Size	Item No	Size	Item No	Size	Item No
30 x 2.1 mm	GDPFP-032130	30x 2.1 mm	GDPFP-032135	30 x 2.1 mm	GDPFP-032150
50 x 2.1 mm	GDPFP-052130	50x 2.1 mm	GDPFP-052135	50 x 2.1 mm	GDPFP-052150
100 x 2.1 mm	GDPFP-102130	100 x 2.1 mm	GDPFP-102135	100 x 2.1 mm	GDPFP-102150
150 x 2.1 mm	GDPFP-152130	150 x 2.1 mm	GDPFP-152135	150 x 2.1 mm	GDPFP-152150
30 x 3.0 mm	GDPFP-033030	30x3.0 mm	GDPFP-033035	30 x 3.0 mm	GDPFP-033050
50 x 3.0 mm	GDPFP-053030	50 x 3.0 mm	GDPFP-053035	50 x 3.0 mm	GDPFP-053050
100x3.0 mm	GDPFP-103030	100 x 3.0 mm	GDPFP-103035	100 x 3.0 mm	GDPFP-103050
150 x 3.0 mm	GDPFP-153030	150 x 3.0 mm	GDPFP-153035	150 x 3.0 mm	GDPFP-153050
250 x 3.0 mm	GDPFP-253030	250 x 3.0 mm	GDPFP-253035	250 x 3.0 mm	GDPFP-253050
30 x 4.6 mm	GDPFP-034630	30x 4.6 mm	GDPFP-034635	30 x 4.6 mm	GDPFP-034650
50 x 4.6 mm	GDPFP-054630	50x 4.6 mm	GDPFP-054635	50 x 4.6 mm	GDPFP-054650
100 x 4.6 mm	GDPFP-104630	100 x 4.6 mm	GDPFP-104635	100 x 4.6 mm	GDPFP-104650
150 x 4.6 mm	GDPFP-154630	150 x 4.6 mm	GDPFP-154635	150 x 4.6 mm	GDPFP-154650
250 x 4.6 mm	GDPFP-254630	250 x 4.6 mm	GDPFP-254635	250 x 4.6 mm	GDPFP-254650

Particle Size: 5 µm	
Size	Item No
150 x 10mm	GDPFP-1510050
250 x 10mm	GDPFP-2510050
100 x 20mm	GDPFP-1020050
150 x 20mm	GDPFP-1520050
250 x 20mm	GDPFP-2520050
100x 30 mm	GDPFP-1030050
150 x 30mm	GDPFP-1530050
250 x 30mm	GDPFP-2530050
100 x 50mm	GDPFP-1050050
150 x 50mm	GDPFP-1550050
250 x 50mm	GDPFP-2550050

## MicroPulite® Platinum Series: New standard for pure silica-based LC columns

Comprehensive performances of these columns are excellent, which can meet most of the application requirements of reversed-phase chromatography. Excellent peak shape and high column efficiency are achieved at low pH.

- Silica gel column, high purity packing media, high specific surface area
- High capacity, excellent peak shape column efficiency, in common use under medium-low pH conditions
- Better peak shape for alkaline compounds.

Stationary Phase	Bonded Phase	Carbon Percentage	Pore Size	Particle Size	USP classification	pH range	The upper limit of temperature
Platinum C18	Special C18	16%	100Å	3, 3.5, 5µm	L1	1-8	60°C (Low pH) 40°C (High pH)
Platinum C8	Special C8	12%	100Å	3, 3.5, 5µm	L7	1-8	60°C (Low pH) 40°C (High pH)

### Application cases

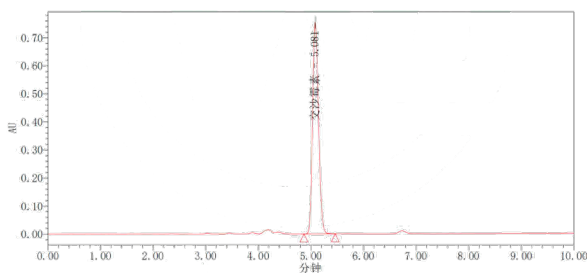
#### Determination of Josamycin

Methodology: self-research

##### Chromatographic conditions:

Column: MicroPulite® Platinum C18 4.6\*250mm 5µm  
Flow rate: 1.0mL/min  
Injection volume: 10µL  
Wavelength: UV 231nm  
Column temperature: 30°C  
Mobile phase: Acetonitrile -0.1%Trifuracetio Acid= (45:55)

Chromatogram:



Substance	Retention time(min)	Area (µv*s)	Height (µv)	USP tailing	USP theoretical plate numbers
1 Josamycin	5.081	5944809	754045	1.18	9473.0

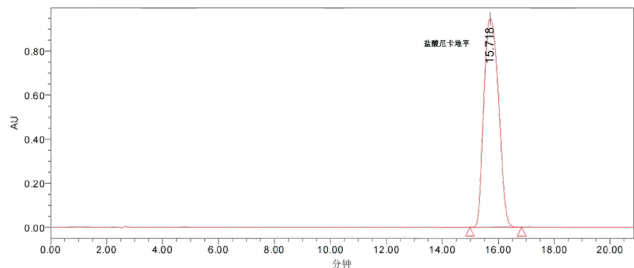
#### Determination of Nicardipine hydrochloride

Methodology: 《Pharmacopoeia of the Peoples Republic of China》 2020

##### Chromatographic conditions:

Column: MicroPulite® Platinum C18 4.6\*250mm 5µm  
Flow rate: 1.0mL/min  
Injection volume: 10µL  
Wavelength: UV 236nm  
Column temperature: 30°C  
Mobile phase: Methanol -0.1mol/L Potassium dihydrogen phosphate= (72:28)

Chromatogram:



Substance	Retention time(min)	Area (µv*s)	Height (µv)	USP tailing	USP theoretical plate numbers
1 Nicardipine hydrochloride	5.081	5944809	754045	1.18	9473.0

### MicroPulite® Platinum C18 Ordering information

Particle Size: 3.5 µm		Particle Size: 5 µm		Particle Size: 5 µm	
Size	Item No	Size	Item No	Size	Item No
30x 2.1 mm	PTC18-032135	30x 2.1 mm	PTC18-032150	150x 10 mm	PTC18-1510050
50x 2.1 mm	PTC18-052135	50 x 2.1 mm	PTC18-052150	250x 10 mm	PTC18-2510050
100x 2.1 mm	PTC18-102135	100 x 2.1 mm	PTC18-102150	100x 20 mm	PTC18-1020050
150x 2.1 mm	PTC18-152135	150x2.1 mm	PTC18-152150	150x 20 mm	PTC18-1520050
30x 3.0 mm	PTC18-033035	30 x 3.0 mm	PTC18-033050	250x 20 mm	PTC18-2520050
50x 3.0 mm	PTC18-053035	50x 3.0 mm	PTC18-053050	100x30 mm	PTC18-1030050
100x 3.0 mm	PTC18-103035	100 x 3.0 mm	PTC18-103050	150x 30 mm	PTC18-1530050
150x 3.0 mm	PTC18-153035	150 x 3.0 mm	PTC18-153050	250x 30 mm	PTC18-2530050
250x 3.0 mm	PTC18-253035	250 x 3.0 mm	PTC18-253050	100x50 mm	PTC18-1050050
30x 4.6 mm	PTC18-034635	30x 4.6 mm	PTC18-034650	150x 50 mm	PTC18-1550050
50x 4.6 mm	PTC18-054635	50x4.6 mm	PTC18-054650	250x 50 mm	PTC18-2550050
100x 4.6 mm	PTC18-104635	100 x 4.6 mm	PTC18-104650		
150x 4.6 mm	PTC18-154635	150 x 4.6 mm	PTC18-154650		
250x 4.6 mm	PTC18-254635	250x 4.6 mm	PTC18-254650		

### MicroPulite® Platinum C8 Ordering information

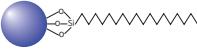
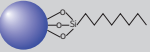
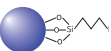


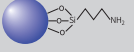
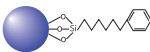




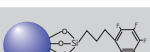
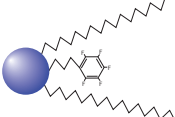
Particle Size: 3.5 µm		Particle Size: 5 µm		Particle Size: 5 µm	
Size	Item No (P/N)	Size	Item No	Size	Item No
30x 2.1 mm	PTC08-032135	30x 2.1 mm	PTC08-032150	150x10 mm	PTC08-1510050
50x 2.1 mm	PTC08-052135	50x 2.1 mm	PTC08-052150	250 x10 mm	PTC08-2510050
100x 2.1 mm	PTC08-102135	100x 2.1 mm	PTC08-102150	100 x 20 mm	PTC08-1020050
150x 2.1 mm	PTC08-152135	150x 2.1 mm	PTC08-152150	150 x 20 mm	PTC08-1520050
30x 3.0 mm	PTC08-033035	30x 3.0 mm	PTC08-033050	250 x 20 mm	PTC08-2520050
50x 3.0 mm	PTC08-053035	50x 3.0 mm	PTC08-053050	100x30 mm	PTC08-1030050
100x 3.0 mm	PTC08-103035	100x 3.0 mm	PTC08-103050	150x30 mm	PTC08-1530050
150x 3.0 mm	PTC08-153035	150x 3.0 mm	PTC08-153050	250x30 mm	PTC08-2530050
250x 3.0 mm	PTC08-253035	250x 3.0 mm	PTC08-253050	100x50 mm	PTC08-1050050
30x 4.6 mm	PTC08-034635	30x 4.6 mm	PTC08-034650	150x50 mm	PTC08-1550050
50x 4.6 mm	PTC08-054635	50x 4.6 mm	PTC08-054650	250 x50 mm	PTC08-2550050
100x 4.6 mm	PTC08-104635	100x 4.6 mm	PTC08-104650		
150x 4.6 mm	PTC08-154635	150x 4.6 mm	PTC08-154650		
250x 4.6 mm	PTC08-254635	250x 4.6 mm	PTC08-254650		



## MicroPulite® XP Series: Hybrid silica technology makes method development more flexible

Adopting unique hybrid silica gel and triple bonding technology, columns show industry-leading wide pH stability and separation performance, while having a long column life. XP series can be adapted to all instrument platforms, and XP packing media are available for semi-prep and preparation LC applications, ensuring seamless method and improving working efficiency.

- Structurally hybrid silica improves the pH tolerance range.
- Patented triple bonding and unique end-capping ensure high column efficiency and excellent peak symmetry.
- The multiple bonded phase design can increase the selectivity of method development and reduce the difficulty of development.
- Strict quality control standards ensure the stability of packing media and columns between

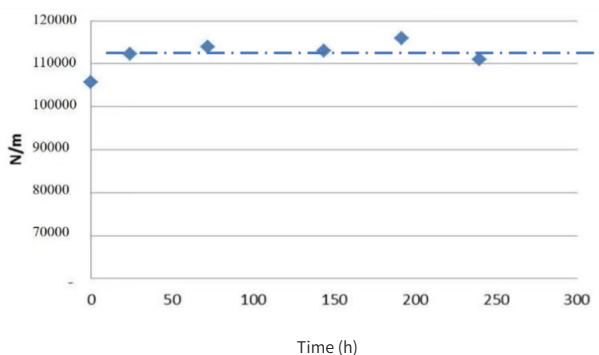
Stationary Phase	Bonded Phase	Carbon Percentage	Pore Size	Particle Size	USP classification	pH range	The upper limit of temperature
XP tC18		18%	130Å	1.7, 2.5, 3, 3.5, 5, 10µm	L1	1-12	80°C (Low pH) 60°C (High pH)
XP tC8		13%	130Å	1.7, 2.5, 3, 3.5, 5, 10µm	L7	1-12	60°C (Low pH) 60°C (High pH)
XP tC4		8%	130Å	3, 3.5, 5, 10µm	L26	1-10	80°C (Low pH) 50°C (High pH)
XP RP18		18%	130Å	1.7, 2.5, 3, 3.5, 5µm	L1	2-11	50°C (Low pH) 45°C (High pH)
XP RP18 Plus		18%	130Å	3.5, 5µm	L1	2-11	50°C (Low pH) 45°C (High pH)
XP NH <sub>2</sub>		9%	130Å	3.5, 5µm	L8	1-9	45°C (Low pH) 45°C (High pH)
XP Phenyl-Hexyl		15%	130Å	1.7, 2.5, 3, 3.5, 5µm	L11	1-12	80°C (Low pH) 60°C (High pH)
XP Amide		12%	130Å	1.7, 2.5, 3, 3.5, 5µm	L68	2-11	90°C (Low pH) 90°C (High pH)
XP HILIC		-	130Å	1.7, 2.5, 3, 3.5, 5µm	L3	1-9	45°C (Low pH) 45°C (High pH)
XP Oligo tC18		14%	130Å	1.7, 2.5, 3, 3.5, 5, 10µm	L1	1-12	80°C (Low pH) 60°C (High pH)
XP T3		14%	130Å	3.5, 5µm	L1	1-12	80°C (Low pH) 60°C (High pH)
XP tPFP		7%	130Å	3.5, 5µm	L43	1-8	45°C (Low pH) 45°C (High pH)
XP tC18/PFP		14.5%	130Å	3.5, 5µm	L43	1-12	45°C (Low pH) 45°C (High pH)

Patent number: CN 104725641 A, CN 101927154 A

## Excellent acid and alkali resistance

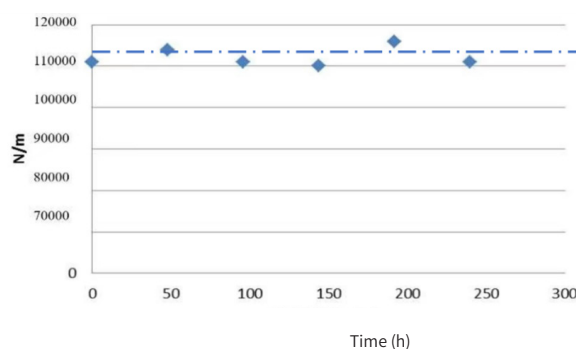
### MicroPulite® XP 3.5µm tC18 alkali resistance test

Methanol: triethylamine (pH10) =70:30 was used as the mobile phase (flow rate 1mL/min, column temperature 50 °C ) to flush the column for 240h. At flushing time of 0, 24, 72, 144, 192, 240 hours, the column was evaluated according to method Elite128 (methanol/water =85/15; naphthalene) to investigate its stability under alkaline conditions. The results showed that there was basically no degradation in column performance.



### MicroPulite® XP 3.5µm tC18 acid resistance test

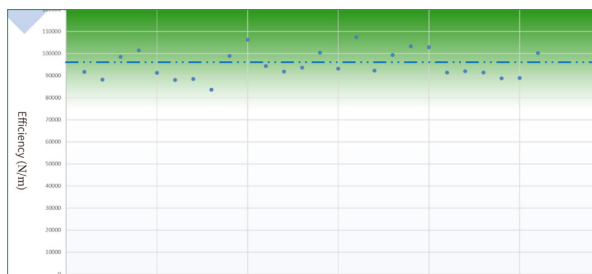
Methanol: trifluoroacetic acid (pH1.0) =70:30 was used as the mobile phase (flow rate 1mL/min, column temperature 50 °C ) to flush the column for 240h. At flushing time of 0, 48, 96, 144, 192, 240 hours, the column was according to method Elite128(methanol、 water; naphthalene) to investigate its stability under alkaline conditions. The results showed that there was basically no degradation in column performance.



## Outstanding batch-to-batch reproducibility

Reproducible column efficiency based on acenaphthene between batches

MicroPulite® XP tC18 5µm



Reproducible retention time of acenaphthene between batches

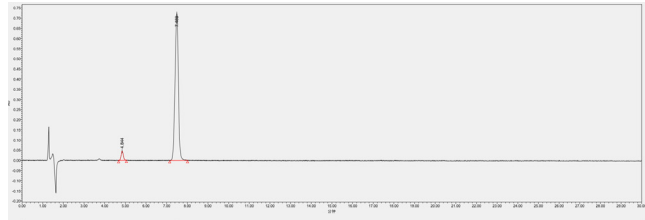
MicroPulite® XP tC18 5µm



## Application cases

### Sample analysis of Sodium lauroylsarcosinate

Column: MicroPulite® XP tC18 4.6\*150mm 5µm  
 Instrument: Waters2695-2998  
 Flow rate: 1.0mL/min  
 Injection volume: 10µL  
 Wavelength: 200nm  
 Column temperature=RT  
 Sample preparation: 1mL of the sample was placed in a 100mL volumetric flask and shaken with water



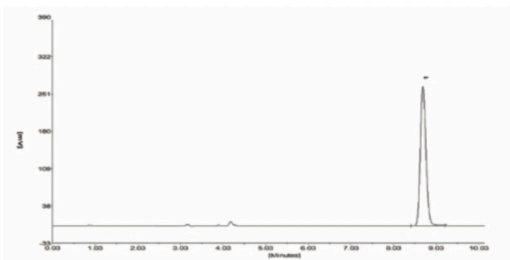
t(min)	Waters(0.1% TFA)	Acetonitrile
0	45	55
30	45	55
30.1	0	100
35	0	100

	Retention time	Peak area	Area percentage	Height	USP tailing	USP theoretical plate numbers
1	4.844	333061	3.91	45742	1.04	9930
2	7.489	8175192	96.09	723058	1.02	10674

### Seamless method transfer from analysis to semi-preparation

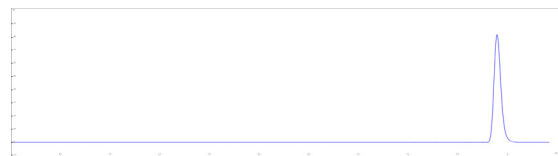
Wavelength: 254nm    Mobile phase: 70% acetonitrile/30%water    Flow rate: Equal proportion to volume

Analytical column:  
MicroPulite® XP tC18 4.6\*250mm 5µm



Item	Sample	Ret Time (min)	USP Tailing (As)	Efficiency (N/m)
1	Toluene	8.71	1.16	86583

Semi-Prep column:  
MicroPulite® XP tC18 30\*250mm 10µm



Item	Sample	Ret Time (min)	USP Tailing (As)	Efficiency (N/m)
1	Toluene	8.80	1.16	68670

## MicroPulite® XP tC18 Ordering information

### UPLC/UHPLC/HPLC Analytical column for instrument adaptation

Particle Size: 1.7 µm	
Size	Item No
30 x 2.1 mm	XPtC18-032117
50 x 2.1 mm	XPtC18-052117
100 x 2.1 mm	XPtC18-102117
150 x 2.1 mm	XPtC18-152117
30 x 3.0 mm	XPtC18-033017
50 x 3.0 mm	XPtC18-053017
100 x 3.0 mm	XPtC18-103017
150 x 3.0 mm	XPtC18-153017

Particle Size: 2.5 µm	
Size	Item No
30 x 2.1 mm	XPtC18-032125
50 x 2.1 mm	XPtC18-052125
100 x 2.1 mm	XPtC18-102125
150 x 2.1 mm	XPtC18-152125
30 x 3.0 mm	XPtC18-033025
50 x 3.0 mm	XPtC18-053025
100 x 3.0 mm	XPtC18-103025
150 x 3.0 mm	XPtC18-153025
250 x 3.0 mm	XPtC18-253025
30 x 4.6 mm	XPtC18-034625
50 x 4.6 mm	XPtC18-054625
100 x 4.6 mm	XPtC18-104625
150 x 4.6 mm	XPtC18-154625
250 x 4.6 mm	XPtC18-254625

Particle Size: 3µm	
Size	Item No
30 x 2.1 mm	XPtC18-032130
50 x 2.1 mm	XPtC18-052130
100 x 2.1 mm	XPtC18-102130
150 x 2.1 mm	XPtC18-152130
30 x 3.0 mm	XPtC18-033030
50 x 3.0 mm	XPtC18-053030
100 x 3.0 mm	XPtC18-103030
150 x 3.0 mm	XPtC18-153030
250 x 3.0 mm	XPtC18-253030
30 x 4.6 mm	XPtC18-034630
50 x 4.6 mm	XPtC18-054630
100 x 4.6 mm	XPtC18-104630
150 x 4.6 mm	XPtC18-154630
250 x 4.6 mm	XPtC18-254630

Particle Size: 3.5 µm	
Size	Item No
30 x 2.1 mm	XPtC18-032135
50 x 2.1 mm	XPtC18-052135
100 x 2.1 mm	XPtC18-102135
150 x 2.1 trim	XPtC18-152135
30 x 3.0 mm	XPtC18-033035
50 x 3.0 mm	XPtC18-053035
100 x 3.0 mm	XPtC18-103035
150 x 3.0 mm	XPtC18-153035
250 x 3.0 mm	XPtC18-253035
30 x 4.6 mm	XPtC18-034635
50 x 4.6 mm	XPtC18-054635
100 x 4.6 mm	XPtC18-104635
150 x 4.6 mm	XPtC18-154635
250 x 4.6 mm	XPtC18-254635

Particle Size: 5 µm	
Size	Item No
30 x 2.1 mm	XPtC18-032150
50 x 2.1 mm	XPtC18-052150
100 x 2.1 mm	XPtC18-102150
150 x 2.1 mm	XPtC18-152150
30 x 3.0 mm	XPtC18-033050
50 x 3.0 mm	XPtC18-053050
100 x 3.0 mm	XPtC18-103050
150 x 3.0 mm	XPtC18-153050
250 x 3.0 mm	XPtC18-253050
30 x 4.6 mm	XPtC18-034650
50 x 4.6 mm	XPtC18-054650
100 x 4.6 mm	XPtC18-104650
150 x 4.6 mm	XPtC18-154650
250 x 4.6 mm	XPtC18-254650

### HPLC/PRE-HPLC Semi-Prep column/ Prep column for instrument adaptation

Particle Size: 5 µm	
Size	Item No
150x10 mm	XPtC18-1510050
250x10 mm	XPtC18-2510050
100x20 mm	XPtC18-1020050
150x20 mm	XPtC18-1520050
250x20 mm	XPtC18-2520050
100x30 mm	XPtC18-1030050
150x30 mm	XPtC18-1530050
250x30 mm	XPtC18-2530050
100x50 mm	XPtC18-1050050
150x50 mm	XPtC18-1550050
250x50 mm	XPtC18-2550050

Particle Size: 10 µm	
Size	Item No
150 x 10 mm	XPtC18-15100100
250 x 10 mm	XPtC18-25100100
100 x 20 mm	XPtC18-10200100
150 x 20 mm	XPtC18-15200100
250 x 20 mm	XPtC18-25200100
100 x 30 mm	XPtC18-10300100
150 x 30 mm	XPtC18-15300100
250 x 30 mm	XPtC18-25300100
100 x 50 mm	XPtC18-10500100
150 x 50 mm	XPtC18-15500100
250 x 50 mm	XPtC18-25500100

## MicroPulite® XP tC8 Ordering information

### UPLC/UHPLC/HPLC Analytical column for instrument adaptation

Particle Size: 1.7 µm	
Size	Item No
30 x 2.1 mm	XPtC08-032117
50 x 2.1 mm	XPtC08-052117
100 x 2.1 mm	XPtC08-102117
150 x 2.1 mm	XPtC08-152117
30 x 3.0 mm	XPtC08-033017
50 x 3.0 mm	XPtC08-053017
100 x 3.0 mm	XPtC08-103017
150 x 3.0 mm	XPtC08-153017

Particle Size: 2.5 µm	
Size	Item No
30 x 2.1 mm	XPtC08-032125
50 x 2.1 mm	XPtC08-052125
100 x 2.1 mm	XPtC08-102125
150 x 2.1 mm	XPtC08-152125
30 x 3.0 mm	XPtC08-033025
50 x 3.0 mm	XPtC08-053025
100 x 3.0 mm	XPtC08-103025
150 x 3.0 mm	XPtC08-153025
250 x 3.0 mm	XPtC08-253025
30 x 4.6 mm	XPtC08-034625
50 x 4.6 mm	XPtC08-054625
100 x 4.6 mm	XPtC08-104625
150 x 4.6 mm	XPtC08-154625
250 x 4.6 mm	XPtC08-254625

Particle Size: 3µm	
Size	Item No
30 x 2.1 mm	XPtC08-032130
50 x 2.1 mm	XPtC08-052130
100 x 2.1 mm	XPtC08-102130
150 x 2.1 mm	XPtC08-152130
30 x 3.0 mm	XPtC08-033030
50 x 3.0 mm	XPtC08-053030
100 x 3.0 mm	XPtC08-103030
150 x 3.0 mm	XPtC08-153030
250 x 3.0 mm	XPtC08-253030
30 x 4.6 mm	XPtC08-034630
50 x 4.6 mm	XPtC08-054630
100 x 4.6 mm	XPtC08-104630
150 x 4.6 mm	XPtC08-154630
250 x 4.6 mm	XPtC08-254630

Particle Size: 3.5 µm	
Size	Item No
30 x 2.1 mm	XPtC08-032135
50 x 2.1 mm	XPtC08-052135
100 x 2.1 mm	XPtC08-102135
150 x 2.1 trim	XPtC08-152135
30 x 3.0 mm	XPtC08-033035
50 x 3.0 mm	XPtC08-053035
100 x 3.0 mm	XPtC08-103035
150 x 3.0 mm	XPtC08-153035
250 x 3.0 mm	XPtC08-253035
30 x 4.6 mm	XPtC08-034635
50 x 4.6 mm	XPtC08-054635
100 x 4.6 mm	XPtC08-104635
150 x 4.6 mm	XPtC08-154635
250 x 4.6 mm	XPtC08-254635

Particle Size: 5 µm	
Size	Item No
30 x 2.1 mm	XPtC08-032150
50 x 2.1 mm	XPtC08-052150
100 x 2.1 mm	XPtC08-102150
150 x 2.1 mm	XPtC08-152150
30 x 3.0 mm	XPtC08-033050
50 x 3.0 mm	XPtC08-053050
100 x 3.0 mm	XPtC08-103050
150 x 3.0 mm	XPtC08-153050
250 x 3.0 mm	XPtC08-253050
30 x 4.6 mm	XPtC08-034650
50 x 4.6 mm	XPtC08-054650
100 x 4.6 mm	XPtC08-104650
150 x 4.6 mm	XPtC08-154650
250 x 4.6 mm	XPtC08-254650

### HPLC/PRE-HPLC Semi-Prep column/ Prep column for instrument adaptation

Particle Size: 5 µm	
Size	Item No
150x10 mm	XPtC08-1510050
250x10 mm	XPtC08-2510050
100x20 mm	XPtC08-1020050
150x20 mm	XPtC08-1520050
250x20 mm	XPtC08-2520050
100x30 mm	XPtC08-1030050
150x30 mm	XPtC08-1530050
250x30 mm	XPtC08-2530050
100x50 mm	XPtC08-1050050
150x50 mm	XPtC08-1550050
250x50 mm	XPtC08-2550050

Particle Size: 10 µm	
Size	Item No
150 x 10 mm	XPtC08-15100100
250 x 10 mm	XPtC08-25100100
100 x 20 mm	XPtC08-10200100
150 x 20 mm	XPtC08-15200100
250 x 20 mm	XPtC08-25200100
100 x 30 mm	XPtC08-10300100
150 x 30 mm	XPtC08-15300100
250 x 30 mm	XPtC08-25300100
100 x 50 mm	XPtC08-10500100
150 x 50 mm	XPtC08-15500100
250 x 50 mm	XPtC08-25500100

## MicroPulite® XP tC4 Ordering information

### UPLC/UHPLC/HPLC Analytical column for instrument adaptation

Particle Size: 3µm		Particle Size: 3.5 µm		Particle Size: 5 µm	
Size	Item No	Size	Item No	Size	Item No
30 x 2.1 mm	XPtC04-032130	30 x 2.1 mm	XPtC04-032135	30 x 2.1 mm	XPtC04-032150
50 x 2.1 mm	XPtC04-052130	50 x 2.1 mm	XPtC04-052135	50 x 2.1 mm	XPtC04-052150
100 x 2.1 mm	XPtC04-102130	100 x 2.1 mm	XPtC04-102135	100 x 2.1 mm	XPtC04-102150
150 x 2.1 mm	XPtC04-152130	150 x 2.1 trim	XPtC04-152135	150 x 2.1 mm	XPtC04-152150
30 x 3.0 mm	XPtC04-033030	30 x 3.0 mm	XPtC04-033035	30 x 3.0 mm	XPtC04-033050
50 x 3.0 mm	XPtC04-053030	50 x 3.0 mm	XPtC04-053035	50 x 3.0 mm	XPtC04-053050
100 x 3.0 mm	XPtC04-103030	100 x 3.0 mm	XPtC04-103035	100 x 3.0 mm	XPtC04-103050
150 x 3.0 mm	XPtC04-153030	150 x 3.0 mm	XPtC04-153035	150 x 3.0 mm	XPtC04-153050
250 x 3.0 mm	XPtC04-253030	250 x 3.0 mm	XPtC04-253035	250 x 3.0 mm	XPtC04-253050
30 x 4.6 mm	XPtC04-034630	30 x 4.6 mm	XPtC04-034635	30 x 4.6 mm	XPtC04-034650
50 x 4.6 mm	XPtC04-054630	50 x 4.6 mm	XPtC04-054635	50 x 4.6 mm	XPtC04-054650
100 x 4.6 mm	XPtC04-104630	100 x 4.6 mm	XPtC04-104635	100 x 4.6 mm	XPtC04-104650
150 x 4.6 mm	XPtC04-154630	150 x 4.6 mm	XPtC04-154635	150 x 4.6 mm	XPtC04-154650
250 x 4.6 mm	XPtC04-254630	250 x 4.6 mm	XPtC04-254635	250 x 4.6 mm	XPtC04-254650

### HPLC/PRE-HPLC Semi-Prep column/ Prep column for instrument adaptation

Particle Size: 5 µm		Particle Size: 10 µm	
Size	Item No	Size	Item No
150x10 mm	XPtC04-1510050	150 x 10 mm	XPtC04-15100100
250x10 mm	XPtC04-2510050	250 x 10 mm	XPtC04-25100100
100x20 mm	XPtC04-1020050	100 x 20 mm	XPtC04-10200100
150x20 mm	XPtC04-1520050	150 x 20 mm	XPtC04-15200100
250x20 mm	XPtC04-2520050	250 x 20 mm	XPtC04-25200100
100x30 mm	XPtC04-1030050	100 x 30 mm	XPtC04-10300100
150x30 mm	XPtC04-1530050	150 x 30 mm	XPtC04-15300100
250x30 mm	XPtC04-2530050	250 x 30 mm	XPtC04-25300100
100x50 mm	XPtC04-1050050	100 x 50 mm	XPtC04-10500100
150x50 mm	XPtC04-1550050	150 x 50 mm	XPtC04-15500100
250x50 mm	XPtC04-2550050	250 x 50 mm	XPtC04-25500100



## MicroPulite® XP RP18 Ordering information

### UPLC/UHPLC/HPLC Analytical column for instrument adaptation

Particle Size: 1.7 µm		Particle Size: 2.5 µm		Particle Size: 3µm	
Size	Item No	Size	Item No	Size	Item No
30 x 2.1 mm	XPR18-032117	30 x 2.1 mm	XPR18-032125	30 x 2.1 mm	XPR18-032130
50 x 2.1 mm	XPR18-052117	50 x 2.1 mm	XPR18-052125	50 x 2.1 mm	XPR18-052130
100 x 2.1 mm	XPR18-102117	100 x 2.1 mm	XPR18-102125	100 x 2.1 mm	XPR18-102130
150 x 2.1 mm	XPR18-152117	150 x 2.1 mm	XPR18-152125	150 x 2.1 mm	XPR18-152130
30 x 3.0 mm	XPR18-033017	30 x 3.0 mm	XPR18-033025	30 x 3.0 mm	XPR18-033030
50 x 3.0 mm	XPR18-053017	50 x 3.0 mm	XPR18-053025	50 x 3.0 mm	XPR18-053030
100 x 3.0 mm	XPR18-103017	100 x 3.0 mm	XPR18-103025	100 x 3.0 mm	XPR18-103030
150 x 3.0 mm	XPR18-153017	150 x 3.0 mm	XPR18-153025	150 x 3.0 mm	XPR18-153030
		250 x 3.0 mm	XPR18-253025	250 x 3.0 mm	XPR18-253030
		30 x 4.6 mm	XPR18-034625	30 x 4.6 mm	XPR18-034630
		50 x 4.6 mm	XPR18-054625	50 x 4.6 mm	XPR18-054630
		100 x 4.6 mm	XPR18-104625	100 x 4.6 mm	XPR18-104630
		150 x 4.6 mm	XPR18-154625	150 x 4.6 mm	XPR18-154630
		250 x 4.6 mm	XPR18-254625	250 x 4.6 mm	XPR18-254630

Particle Size: 3.5 µm		Particle Size: 5 µm	
Size	Item No	Size	Item No
30 x 2.1 mm	XPR18-032135	30 x 2.1 mm	XPR18-032150
50 x 2.1 mm	XPR18-052135	50 x 2.1 mm	XPR18-052150
100 x 2.1 mm	XPR18-102135	100 x 2.1 mm	XPR18-102150
150 x 2.1 trim	XPR18-152135	150 x 2.1 mm	XPR18-152150
30 x 3.0 mm	XPR18-033035	30 x 3.0 mm	XPR18-033050
50 x 3.0 mm	XPR18-053035	50 x 3.0 mm	XPR18-053050
100 x 3.0 mm	XPR18-103035	100 x 3.0 mm	XPR18-103050
150 x 3.0 mm	XPR18-153035	150 x 3.0 mm	XPR18-153050
250 x 3.0 mm	XPR18-253035	250 x 3.0 mm	XPR18-253050
30 x 4.6 mm	XPR18-034635	30 x 4.6 mm	XPR18-034650
50 x 4.6 mm	XPR18-054635	50 x 4.6 mm	XPR18-054650
100 x 4.6 mm	XPR18-104635	100 x 4.6 mm	XPR18-104650
150 x 4.6 mm	XPR18-154635	150 x 4.6 mm	XPR18-154650
250 x 4.6 mm	XPR18-254635	250 x 4.6 mm	XPR18-254650

## MicorPulite® XP RP18 Plus Ordering information

### UPLC/UHPLC/HPLC Analytical column for instrument adaptation

Particle Size: 3.5 µm		Particle Size: 5 µm	
Size	Item No	Size	Item No
30 x 2.1 mm	XPR18P-032135	30 x 2.1 mm	XPR18P-032150
50 x 2.1 mm	XPR18P-052135	50 x 2.1 mm	XPR18P-052150
100 x 2.1 mm	XPR18P-102135	100 x 2.1 mm	XPR18P-102150
150 x 2.1 trim	XPR18P-152135	150 x 2.1 mm	XPR18P-152150
30 x 3.0 mm	XPR18P-033035	30 x 3.0 mm	XPR18P-033050
50 x 3.0 mm	XPR18P-053035	50 x 3.0 mm	XPR18P-053050
100 x 3.0 mm	XPR18P-103035	100 x 3.0 mm	XPR18P-103050
150 x 3.0 mm	XPR18P-153035	150 x 3.0 mm	XPR18P-153050
250 x 3.0 mm	XPR18P-253035	250 x 3.0 mm	XPR18P-253050
30 x 4.6 mm	XPR18P-034635	30 x 4.6 mm	XPR18P-034650
50 x 4.6 mm	XPR18P-054635	50 x 4.6 mm	XPR18P-054650
100 x 4.6 mm	XPR18P-104635	100 x 4.6 mm	XPR18P-104650
150 x 4.6 mm	XPR18P-154635	150 x 4.6 mm	XPR18P-154650
250 x 4.6 mm	XPR18P-254635	250 x 4.6 mm	XPR18P-254650

## MicorPulite® XP NH<sub>2</sub> Ordering information

### UPLC/UHPLC/HPLC Analytical column for instrument adaptation

Particle Size: 3.5 µm		Particle Size: 5 µm	
Size	Item No	Size	Item No
30 x 2.1 mm	XPNH-032135	30 x 2.1 mm	XPNH-032150
50 x 2.1 mm	XPNH-052135	50 x 2.1 mm	XPNH-052150
100 x 2.1 mm	XPNH-102135	100 x 2.1 mm	XPNH-102150
150 x 2.1 trim	XPNH-152135	150 x 2.1 mm	XPNH-152150
30 x 3.0 mm	XPNH-033035	30 x 3.0 mm	XPNH-033050
50 x 3.0 mm	XPNH-053035	50 x 3.0 mm	XPNH-053050
100 x 3.0 mm	XPNH-103035	100 x 3.0 mm	XPNH-103050
150 x 3.0 mm	XPNH-153035	150 x 3.0 mm	XPNH-153050
250 x 3.0 mm	XPNH-253035	250 x 3.0 mm	XPNH-253050
30 x 4.6 mm	XPNH-034635	30 x 4.6 mm	XPNH-034650
50 x 4.6 mm	XPNH-054635	50 x 4.6 mm	XPNH-054650
100 x 4.6 mm	XPNH-104635	100 x 4.6 mm	XPNH-104650
150 x 4.6 mm	XPNH-154635	150 x 4.6 mm	XPNH-154650
250 x 4.6 mm	XPNH-254635	250 x 4.6 mm	XPNH-254650

## MicroPulite® XP Phenyl- Hexyl Ordering information

### UPLC/UHPLC/HPLC Analytical column for instrument adaptation

Particle Size: 1.7 µm		Particle Size: 2.5 µm		Particle Size: 3 µm		Particle Size: 3.5 µm		Particle Size: 5 µm	
Size	Item No	Size	Item No	Size	Item No	Size	Item No	Size	Item No
30 x 2.1 mm	XPPH-032117	30 x 2.1 mm	XPPH-032125	30 x 2.1 mm	XPPH-032130	30 x 2.1 mm	XPPH-032135	30 x 2.1 mm	XPPH-032150
50 x 2.1 mm	XPPH-052117	50 x 2.1 mm	XPPH-052125	50 x 2.1 mm	XPPH-052130	50 x 2.1 mm	XPPH-052135	50 x 2.1 mm	XPPH-052150
100 x 2.1 mm	XPPH-102117	100 x 2.1 mm	XPPH-102125	100 x 2.1 mm	XPPH-102130	100 x 2.1 mm	XPPH-102135	100 x 2.1 mm	XPPH-102150
150 x 2.1 mm	XPPH-152117	150 x 2.1 mm	XPPH-152125	150 x 2.1 mm	XPPH-152130	150 x 2.1 trim	XPPH-152135	150 x 2.1 mm	XPPH-152150
30 x 3.0 mm	XPPH-033017	30 x 3.0 mm	XPPH-033025	30 x 3.0 mm	XPPH-033030	30 x 3.0 mm	XPPH-033035	30 x 3.0 mm	XPPH-033050
50 x 3.0 mm	XPPH-053017	50 x 3.0 mm	XPPH-053025	50 x 3.0 mm	XPPH-053030	50 x 3.0 mm	XPPH-053035	50 x 3.0 mm	XPPH-053050
100 x 3.0 mm	XPPH-103017	100 x 3.0 mm	XPPH-103025	100 x 3.0 mm	XPPH-103030	100 x 3.0 mm	XPPH-103035	100 x 3.0 mm	XPPH-103050
150 x 3.0 mm	XPPH-153017	150 x 3.0 mm	XPPH-153025	150 x 3.0 mm	XPPH-153030	150 x 3.0 mm	XPPH-153035	150 x 3.0 mm	XPPH-153050
		250 x 3.0 mm	XPPH-253025	250 x 3.0 mm	XPPH-253030	250 x 3.0 mm	XPPH-253035	250 x 3.0 mm	XPPH-253050
		30 x 4.6 mm	XPPH-034625	30 x 4.6 mm	XPPH-034630	30 x 4.6 mm	XPPH-034635	30 x 4.6 mm	XPPH-034650
		50 x 4.6 mm	XPPH-054625	50 x 4.6 mm	XPPH-054630	50 x 4.6 mm	XPPH-054635	50 x 4.6 mm	XPPH-054650
		100 x 4.6 mm	XPPH-104625	100 x 4.6 mm	XPPH-104630	100 x 4.6 mm	XPPH-104635	100 x 4.6 mm	XPPH-104650
		150 x 4.6 mm	XPPH-154625	150 x 4.6 mm	XPPH-154630	150 x 4.6 mm	XPPH-154635	150 x 4.6 mm	XPPH-154650
		250 x 4.6 mm	XPPH-254625	250 x 4.6 mm	XPPH-254630	250 x 4.6 mm	XPPH-254635	250 x 4.6 mm	XPPH-254650

## MicroPulite® XP Amide Ordering information

### UPLC/UHPLC/HPLC Analytical column for instrument adaptation

Particle Size: 1.7 μm	
Size	Item No
30 x 2.1 mm	XPA-032117
50 x 2.1 mm	XPA-052117
100 x 2.1 mm	XPA-102117
150 x 2.1 mm	XPA-152117
30 x 3.0 mm	XPA-033017
50 x 3.0 mm	XPA-053017
100 x 3.0 mm	XPA-103017
150 x 3.0 mm	XPA-153017

Particle Size: 2.5 μm	
Size	Item No
30 x 2.1 mm	XPA-032125
50 x 2.1 mm	XPA-052125
100 x 2.1 mm	XPA-102125
150 x 2.1 mm	XPA-152125
30 x 3.0 mm	XPA-033025
50 x 3.0 mm	XPA-053025
100 x 3.0 mm	XPA-103025
150 x 3.0 mm	XPA-153025
250 x 3.0 mm	XPA-253025
30 x 4.6 mm	XPA-034625
50 x 4.6 mm	XPA-054625
100 x 4.6 mm	XPA-104625
150 x 4.6 mm	XPA-154625
250 x 4.6 mm	XPA-254625

Particle Size: 3 μm	
Size	Item No
30 x 2.1 mm	XPA-032130
50 x 2.1 mm	XPA-052130
100 x 2.1 mm	XPA-102130
150 x 2.1 mm	XPA-152130
30 x 3.0 mm	XPA-033030
50 x 3.0 mm	XPA-053030
100 x 3.0 mm	XPA-103030
150 x 3.0 mm	XPA-153030
250 x 3.0 mm	XPA-253030
30 x 4.6 mm	XPA-034630
50 x 4.6 mm	XPA-054630
100 x 4.6 mm	XPA-104630
150 x 4.6 mm	XPA-154630
250 x 4.6 mm	XPA-254630

Particle Size: 3.5 μm	
Size	Item No
30 x 2.1 mm	XPA-032135
50 x 2.1 mm	XPA-052135
100 x 2.1 mm	XPA-102135
150 x 2.1 trim	XPA-152135
30 x 3.0 mm	XPA-033035
50 x 3.0 mm	XPA-053035
100 x 3.0 mm	XPA-103035
150 x 3.0 mm	XPA-153035
250 x 3.0 mm	XPA-253035
30 x 4.6 mm	XPA-034635
50 x 4.6 mm	XPA-054635
100 x 4.6 mm	XPA-104635
150 x 4.6 mm	XPA-154635
250 x 4.6 mm	XPA-254635

Particle Size: 5 μm	
Size	Item No
30 x 2.1 mm	XPA-032150
50 x 2.1 mm	XPA-052150
100 x 2.1 mm	XPA-102150
150 x 2.1 mm	XPA-152150
30 x 3.0 mm	XPA-033050
50 x 3.0 mm	XPA-053050
100 x 3.0 mm	XPA-103050
150 x 3.0 mm	XPA-153050
250 x 3.0 mm	XPA-253050
30 x 4.6 mm	XPA-034650
50 x 4.6 mm	XPA-054650
100 x 4.6 mm	XPA-104650
150 x 4.6 mm	XPA-154650
250 x 4.6 mm	XPA-254650

### Application case

#### D-Glucosamine sulfate

Methodology: self-research

#### Chromatographic conditions:

Column: MicroPulite® XP Amide 4.6\*250mm 5μm

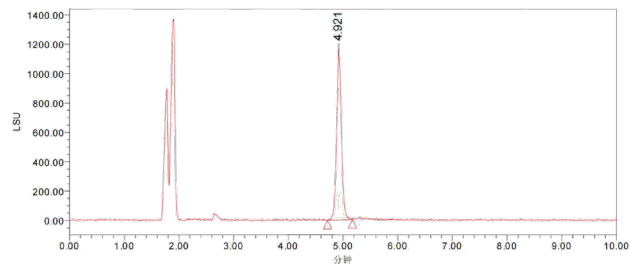
Flow rate: 1.0mL/min

Detector: ELSD

Column temperature: 40°C

Mobile phase: Acetonitrile-0.1%Triethylammonium= (65:35)

Chromatogram:



Substance	Retention time(min)	Area (μv*s)	Height (μv)	USP tailing	USP theoretical plate numbers
1	4.921	7096640	1162874	1.10	15506.99

## MicroPulite® XP HILIC Ordering information

### UPLC/UHPLC/HPLC Analytical column for instrument adaptation

Particle Size: 1.7 μm		Particle Size: 2.5 μm		Particle Size: 3 μm	
Size	Item No	Size	Item No	Size	Item No
30 x 2.1 mm	XPH-032117	30 x 2.1 mm	XPH-032125	30 x 2.1 mm	XPH-032130
50 x 2.1 mm	XPH-052117	50 x 2.1 mm	XPH-052125	50 x 2.1 mm	XPH-052130
100 x 2.1 mm	XPH-102117	100 x 2.1 mm	XPH-102125	100 x 2.1 mm	XPH-102130
150 x 2.1 mm	XPH-152117	150 x 2.1 mm	XPH-152125	150 x 2.1 mm	XPH-152130
30 x 3.0 mm	XPH-033017	30 x 3.0 mm	XPH-033025	30 x 3.0 mm	XPH-033030
50 x 3.0 mm	XPH-053017	50 x 3.0 mm	XPH-053025	50 x 3.0 mm	XPH-053030
100 x 3.0 mm	XPH-103017	100 x 3.0 mm	XPH-103025	100 x 3.0 mm	XPH-103030
150 x 3.0 mm	XPH-153017	150 x 3.0 mm	XPH-153025	150 x 3.0 mm	XPH-153030
		250 x 3.0 mm	XPH-253025	250 x 3.0 mm	XPH-253030
		30 x 4.6 mm	XPH-034625	30 x 4.6 mm	XPH-034630
		50 x 4.6 mm	XPH-054625	50 x 4.6 mm	XPH-054630
		100 x 4.6 mm	XPH-104625	100 x 4.6 mm	XPH-104630
		150 x 4.6 mm	XPH-154625	150 x 4.6 mm	XPH-154630
		250 x 4.6 mm	XPH-254625	250 x 4.6 mm	XPH-254630

Particle Size: 3.5 μm		Particle Size: 5 μm	
Size	Item No	Size	Item No
30 x 2.1 mm	XPH-032135	30 x 2.1 mm	XPH-032150
50 x 2.1 mm	XPH-052135	50 x 2.1 mm	XPH-052150
100 x 2.1 mm	XPH-102135	100 x 2.1 mm	XPH-102150
150 x 2.1 trim	XPH-152135	150 x 2.1 mm	XPH-152150
30 x 3.0 mm	XPH-033035	30 x 3.0 mm	XPH-033050
50 x 3.0 mm	XPH-053035	50 x 3.0 mm	XPH-053050
100 x 3.0 mm	XPH-103035	100 x 3.0 mm	XPH-103050
150 x 3.0 mm	XPH-153035	150 x 3.0 mm	XPH-153050
250 x 3.0 mm	XPH-253035	250 x 3.0 mm	XPH-253050
30 x 4.6 mm	XPH-034635	30 x 4.6 mm	XPH-034650
50 x 4.6 mm	XPH-054635	50 x 4.6 mm	XPH-054650
100 x 4.6 mm	XPH-104635	100 x 4.6 mm	XPH-104650
150 x 4.6 mm	XPH-154635	150 x 4.6 mm	XPH-154650
250 x 4.6 mm	XPH-254635	250 x 4.6 mm	XPH-254650

### Application case

#### Determination of Cyromazine Residues in Animal Foods

Methodology: GB 31658.12-2021

#### Chromatographic conditions:

Column: MicroPulite® XP HILIC 4.6\*150mm 3.5μm

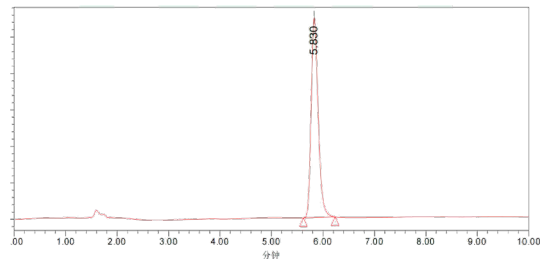
Flow rate: 0.3mL/min

Detector: UV 214nm

Column temperature: 30°C

Mobile phase: Acetonitrile -25mmol/L= (96:4)

Chromatogram:



	Substance	Retention time(min)	Area (μv*s)	Height (μv)	USP tailing	USP theoretical plate numbers
1	-	5.830	260789	-	1.28	8955.1

## MicorPulite® XP Oligo tC18 Ordering information

### UPLC/UHPLC/HPLC Analytical column for instrument adaptation

Particle Size: 1.7 µm	
Size	Item No
30 x 2.1 mm	XPOTC18-032117
50 x 2.1 mm	XPOTC18-052117
100 x 2.1 mm	XPOTC18-102117
150 x 2.1 mm	XPOTC18-152117
30 x 3.0 mm	XPOTC18-033017
50 x 3.0 mm	XPOTC18-053017
100 x 3.0 mm	XPOTC18-103017
150 x 3.0 mm	XPOTC18-153017

Particle Size: 2.5 µm	
Size	Item No
30 x 2.1 mm	XPOTC18-032125
50 x 2.1 mm	XPOTC18-052125
100 x 2.1 mm	XPOTC18-102125
150 x 2.1 mm	XPOTC18-152125
30 x 3.0 mm	XPOTC18-033025
50 x 3.0 mm	XPOTC18-053025
100 x 3.0 mm	XPOTC18-103025
150 x 3.0 mm	XPOTC18-153025
250 x 3.0 mm	XPOTC18-253025
30 x 4.6 mm	XPOTC18-034625
50 x 4.6 mm	XPOTC18-054625
100 x 4.6 mm	XPOTC18-104625
150 x 4.6 mm	XPOTC18-154625
250 x 4.6 mm	XPOTC18-254625

Particle Size: 3µm	
Size	Item No
30 x 2.1 mm	XPOTC18-032130
50 x 2.1 mm	XPOTC18-052130
100 x 2.1 mm	XPOTC18-102130
150 x 2.1 mm	XPOTC18-152130
30 x 3.0 mm	XPOTC18-033030
50 x 3.0 mm	XPOTC18-053030
100 x 3.0 mm	XPOTC18-103030
150 x 3.0 mm	XPOTC18-153030
250 x 3.0 mm	XPOTC18-253030
30 x 4.6 mm	XPOTC18-034630
50 x 4.6 mm	XPOTC18-054630
100 x 4.6 mm	XPOTC18-104630
150 x 4.6 mm	XPOTC18-154630
250 x 4.6 mm	XPOTC18-254630

Particle Size: 3.5 µm	
Size	Item No
30 x 2.1 mm	XPOTC18-032135
50 x 2.1 mm	XPOTC18-052135
100 x 2.1 mm	XPOTC18-102135
150 x 2.1 trim	XPOTC18-152135
30 x 3.0 mm	XPOTC18-033035
50 x 3.0 mm	XPOTC18-053035
100 x 3.0 mm	XPOTC18-103035
150 x 3.0 mm	XPOTC18-153035
250 x 3.0 mm	XPOTC18-253035
30 x 4.6 mm	XPOTC18-034635
50 x 4.6 mm	XPOTC18-054635
100 x 4.6 mm	XPOTC18-104635
150 x 4.6 mm	XPOTC18-154635
250 x 4.6 mm	XPOTC18-254635

Particle Size: 5 µm	
Size	Item No
30 x 2.1 mm	XPOTC18-032150
50 x 2.1 mm	XPOTC18-052150
100 x 2.1 mm	XPOTC18-102150
150 x 2.1 mm	XPOTC18-152150
30 x 3.0 mm	XPOTC18-033050
50 x 3.0 mm	XPOTC18-053050
100 x 3.0 mm	XPOTC18-103050
150 x 3.0 mm	XPOTC18-153050
250 x 3.0 mm	XPOTC18-253050
30 x 4.6 mm	XPOTC18-034650
50 x 4.6 mm	XPOTC18-054650
100 x 4.6 mm	XPOTC18-104650
150 x 4.6 mm	XPOTC18-154650
250 x 4.6 mm	XPOTC18-254650

### HPLC/PRE-HPLC Semi-Prep column/ Prep column for instrument adaptation

Particle Size: 5 µm	
Size	Item No
150x10 mm	XPOTC18-1510050
250x10 mm	XPOTC18-2510050
100x20 mm	XPOTC18-1020050
150x20 mm	XPOTC18-1520050
250x20 mm	XPOTC18-2520050
100x30 mm	XPOTC18-1030050
150x30 mm	XPOTC18-1530050
250x30 mm	XPOTC18-2530050
100x50 mm	XPOTC18-1050050
150x50 mm	XPOTC18-1550050
250x50 mm	XPOTC18-2550050

Particle Size: 10 µm	
Size	Item No
150 x 10 mm	XPOTC18-15100100
250 x 10 mm	XPOTC18-25100100
100 x 20 mm	XPOTC18-10200100
150 x 20 mm	XPOTC18-15200100
250 x 20 mm	XPOTC18-25200100
100 x 30 mm	XPOTC18-10300100
150 x 30 mm	XPOTC18-15300100
250 x 30 mm	XPOTC18-25300100
100 x 50 mm	XPOTC18-10500100
150 x 50 mm	XPOTC18-15500100
250 x 50 mm	XPOTC18-25500100

## MicorPulite® XP T3 Ordering information

### UPLC/UHPLC/HPLC Analytical column for instrument adaptation

Particle Size: 3.5 µm		Particle Size: 5 µm	
Size	Item No	Size	Item No
30 x 2.1 mm	XPT3-032135	30 x 2.1 mm	XPT3-032150
50 x 2.1 mm	XPT3-052135	50 x 2.1 mm	XPT3-052150
100 x 2.1 mm	XPT3-102135	100 x 2.1 mm	XPT3-102150
150 x 2.1 trim	XPT3-152135	150 x 2.1 mm	XPT3-152150
30 x 3.0 mm	XPT3-033035	30 x 3.0 mm	XPT3-033050
50 x 3.0 mm	XPT3-053035	50 x 3.0 mm	XPT3-053050
100 x 3.0 mm	XPT3-103035	100 x 3.0 mm	XPT3-103050
150 x 3.0 mm	XPT3-153035	150 x 3.0 mm	XPT3-153050
250 x 3.0 mm	XPT3-253035	250 x 3.0 mm	XPT3-253050
30 x 4.6 mm	XPT3-034635	30 x 4.6 mm	XPT3-034650
50 x 4.6 mm	XPT3-054635	50 x 4.6 mm	XPT3-054650
100 x 4.6 mm	XPT3-104635	100 x 4.6 mm	XPT3-104650
150 x 4.6 mm	XPT3-154635	150 x 4.6 mm	XPT3-154650
250 x 4.6 mm	XPT3-254635	250 x 4.6 mm	XPT3-254650

## MicorPulite® XP tPPF Ordering information

### UPLC/UHPLC/HPLC Analytical column for instrument adaptation

Particle Size: 3.5 µm		Particle Size: 5 µm	
Size	Item No	Size	Item No
30 x 2.1 mm	XPtPPF-032135	30 x 2.1 mm	XPtPPF-032150
50 x 2.1 mm	XPtPPF-052135	50 x 2.1 mm	XPtPPF-052150
100 x 2.1 mm	XPtPPF-102135	100 x 2.1 mm	XPtPPF-102150
150 x 2.1 trim	XPtPPF-152135	150 x 2.1 mm	XPtPPF-152150
30 x 3.0 mm	XPtPPF-033035	30 x 3.0 mm	XPtPPF-033050
50 x 3.0 mm	XPtPPF-053035	50 x 3.0 mm	XPtPPF-053050
100 x 3.0 mm	XPtPPF-103035	100 x 3.0 mm	XPtPPF-103050
150 x 3.0 mm	XPtPPF-153035	150 x 3.0 mm	XPtPPF-153050
250 x 3.0 mm	XPtPPF-253035	250 x 3.0 mm	XPtPPF-253050
30 x 4.6 mm	XPtPPF-034635	30 x 4.6 mm	XPtPPF-034650
50 x 4.6 mm	XPtPPF-054635	50 x 4.6 mm	XPtPPF-054650
100 x 4.6 mm	XPtPPF-104635	100 x 4.6 mm	XPtPPF-104650
150 x 4.6 mm	XPtPPF-154635	150 x 4.6 mm	XPtPPF-154650
250 x 4.6 mm	XPtPPF-254635	250 x 4.6 mm	XPtPPF-254650

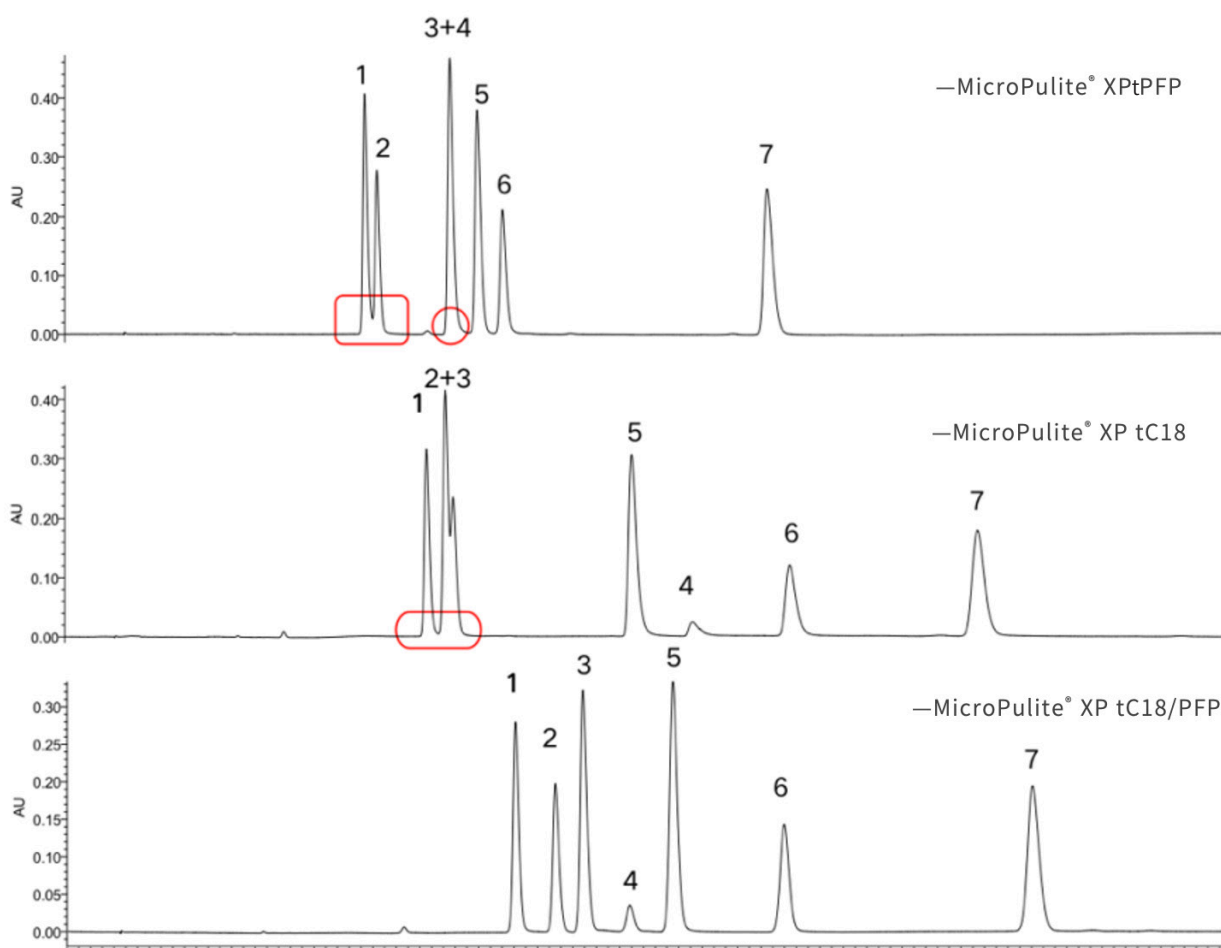


## MicorPulite® XP tC18/PFP Ordering information

### UPLC/UHPLC/HPLC Analytical column for instrument adaptation

Particle Size: 3.5 μm		Particle Size: 5 μm	
Size	Item No	Size	Item No
30 x 2.1 mm	XPtFP18-032135	30 x 2.1 mm	XPtFP18-032150
50 x 2.1 mm	XPtFP18-052135	50 x 2.1 mm	XPtFP18-052150
100 x 2.1 mm	XPtFP18-102135	100 x 2.1 mm	XPtFP18-102150
150 x 2.1 trim	XPtFP18-152135	150 x 2.1 mm	XPtFP18-152150
30 x 3.0 mm	XPtFP18-033035	30 x 3.0 mm	XPtFP18-033050
50 x 3.0 mm	XPtFP18-053035	50 x 3.0 mm	XPtFP18-053050
100 x 3.0 mm	XPtFP18-103035	100 x 3.0 mm	XPtFP18-103050
150 x 3.0 mm	XPtFP18-153035	150 x 3.0 mm	XPtFP18-153050
250 x 3.0 mm	XPtFP18-253035	250 x 3.0 mm	XPtFP18-253050
30 x 4.6 mm	XPtFP18-034635	30 x 4.6 mm	XPtFP18-034650
50 x 4.6 mm	XPtFP18-054635	50 x 4.6 mm	XPtFP18-054650
100 x 4.6 mm	XPtFP18-104635	100 x 4.6 mm	XPtFP18-104650
150 x 4.6 mm	XPtFP18-154635	150 x 4.6 mm	XPtFP18-154650
250 x 4.6 mm	XPtFP18-254635	250 x 4.6 mm	XPtFP18-254650

Mobile phase: Water: Methanol=65:35; Wavelength: 230nm; Column temperature: 30°C

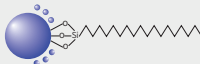
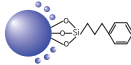



The above experimental results show that C18/PFP has similar water retention ability as C18, the retention of single-bonded PFP is relatively weak, and the selectivity of single-bonded C18 for the benzene ring trisubstituted isomers is relatively poor, while MicroPulite® XP tC18/PFP combines the selectivity of both C18 and PFP for the Stationary Phase, which is a very good enhancement of the performance of the separation of the stationary phase of the MicroPulite® XP tC18/PFP.

## MicroPulite® PHS XP Series

PHS XP chromatographic column adopts hybrid silica gel particles with surface charge structure, which has the characteristics of hybrid silica gel. At the same time, it shows better chromatographic selectivity and better peak shape in mobile phase with low Ionic strength.

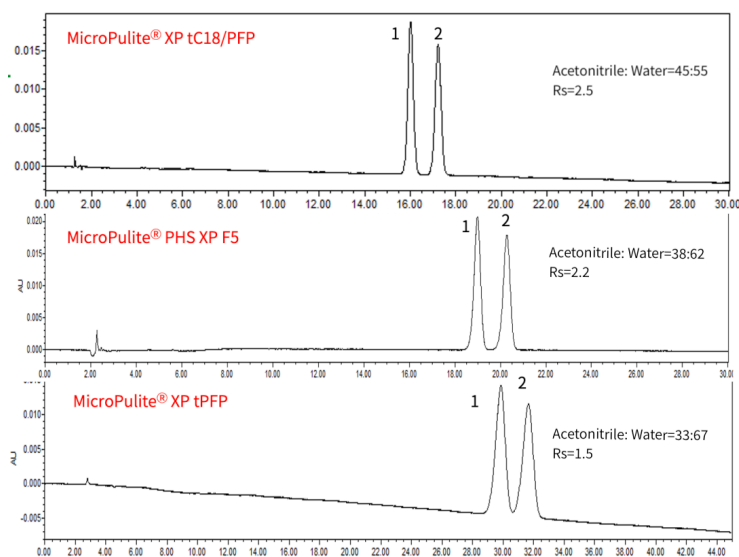
- In acidic medium , alkaline analytes can exhibit excellent peak shape and sample loading
- pH1-11, wide pH conditions facilitate method development and screening
- Rapid pH switching balance during LCMS analysis
- Especially suitable for LC-MS analysis of alkaline analytes and peptides, such as structural identification, DMPK, veterinary drug residues, etc

Stationary Phase	Bonded Phase	Carbon Percentage	Pore Size	Particle Size	USP classification	pH Range	The upper limit of temperature
PHS XP tC18		15%	130Å	1.7,2,5,3 3.5, 5, 7,10µm	L1	1-11	80°C (Low pH) 45°C (High pH)
PHS XP Phenyl-Hexyl		14%	130Å	3.5, 5µm	L11	1-11	80°C (Low pH) 45°C (High pH)
PHS XP F5		10%	130Å	3.5, 5µm	L43	1-8	60°C (Low pH) 45°C (High pH)

### Application case

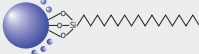
#### Isolation of travoprost and its isomeric impurity 5,6-trans-travoprost

Column: 4.6\*150mm 3.5µm  
 Flow rate: 1.0mL/min  
 Injection volume: 10µL  
 Wavelength: 220nm  
 Column temperature: 30°C  
 Mobile phase: Acetonitrile:Water=45:55



CONCLUSION: All the above three PFP-bonded stationary phase can realize the separation of travoprost and its isomeric impurity 5,6-trans-travoprost.

## MicroPulite® PHS XP tC18 Ordering information

Stationary Phase	Bonded Phase	Carbon Percentage	Pore Size	End-capping	Particle Size	USP	pH Range	The upper limit of temperature
PHS XP tC18		15%	130Å	Dual end-capping	1.7,2.5,3 3.5, 5,7, 10µm	L1	1-11	80°C(Low pH) 45°C(High pH)

### UPLC/UHPLC/HPLC Analytical column for instrument adaptation

Particle Size: 1.7 µm	
Size	Item No
30 x 2.1 mm	XPtC18P-032117
50 x 2.1 mm	XPtC18P-052117
100 x 2.1 mm	XPtC18P-102117
150 x 2.1 mm	XPtC18P-152117
30 x 3.0 mm	XPtC18P-033017
50 x 3.0 mm	XPtC18P-053017
100 x 3.0 mm	XPtC18P-103017
150 x 3.0 mm	XPtC18P-153017

Particle Size: 2.5 µm	
Size	Item No
30 x 2.1 mm	XPtC18P-032125
50 x 2.1 mm	XPtC18P-052125
100 x 2.1 mm	XPtC18P-102125
150 x 2.1 mm	XPtC18P-152125
30 x 3.0 mm	XPtC18P-033025
50 x 3.0 mm	XPtC18P-053025
100 x 3.0 mm	XPtC18P-103025
150 x 3.0 mm	XPtC18P-153025
250 x 3.0 mm	XPtC18P-253025
30 x 4.6 mm	XPtC18P-034625
50 x 4.6 mm	XPtC18P-054625
100 x 4.6 mm	XPtC18P-104625
150 x 4.6 mm	XPtC18P-154625
250 x 4.6 mm	XPtC18P-254625

Particle Size: 3µm	
Size	Item No
30 x 2.1 mm	XPtC18P-032130
50 x 2.1 mm	XPtC18P-052130
100 x 2.1 mm	XPtC18P-102130
150 x 2.1 mm	XPtC18P-152130
30 x 3.0 mm	XPtC18P-033030
50 x 3.0 mm	XPtC18P-053030
100 x 3.0 mm	XPtC18P-103030
150 x 3.0 mm	XPtC18P-153030
250 x 3.0 mm	XPtC18P-253030
30 x 4.6 mm	XPtC18P-034630
50 x 4.6 mm	XPtC18P-054630
100 x 4.6 mm	XPtC18P-104630
150 x 4.6 mm	XPtC18P-154630
250 x 4.6 mm	XPtC18P-254630

Particle Size: 3.5 µm	
Size	Item No
30 x 2.1 mm	XPtC18P-032135
50 x 2.1 mm	XPtC18P-052135
100 x 2.1 mm	XPtC18P-102135
150 x 2.1 trim	XPtC18P-152135
30 x 3.0 mm	XPtC18P-033035
50 x 3.0 mm	XPtC18P-053035
100 x 3.0 mm	XPtC18P-103035
150 x 3.0 mm	XPtC18P-153035
250 x 3.0 mm	XPtC18P-253035
30 x 4.6 mm	XPtC18P-034635
50 x 4.6 mm	XPtC18P-054635
100 x 4.6 mm	XPtC18P-104635
150 x 4.6 mm	XPtC18P-154635
250 x 4.6 mm	XPtC18P-254635

Particle Size: 5 µm	
Size	Item No
30 x 2.1 mm	XPtC18P-032150
50 x 2.1 mm	XPtC18P-052150
100 x 2.1 mm	XPtC18P-102150
150 x 2.1 mm	XPtC18P-152150
30 x 3.0 mm	XPtC18P-033050
50 x 3.0 mm	XPtC18P-053050
100 x 3.0 mm	XPtC18P-103050
150 x 3.0 mm	XPtC18P-153050
250 x 3.0 mm	XPtC18P-253050
30 x 4.6 mm	XPtC18P-034650
50 x 4.6 mm	XPtC18P-054650
100 x 4.6 mm	XPtC18P-104650
150 x 4.6 mm	XPtC18P-154650
250 x 4.6 mm	XPtC18P-254650

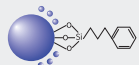
### HPLC/PRE-HPLC Semi-Prep column/ Prep column for instrument adaptation

Particle Size: 5 µm	
Size	Item No
150x10 mm	XPtC18P-1510050
250x10 mm	XPtC18P-2510050
100x20 mm	XPtC18P-1020050
150x20 mm	XPtC18P-1520050
250x20 mm	XPtC18P-2520050
100x30 mm	XPtC18P-1030050
150x30 mm	XPtC18P-1530050
250x30 mm	XPtC18P-2530050
100x50 mm	XPtC18P-1050050
150x50 mm	XPtC18P-1550050
250x50 mm	XPtC18P-2550050

Particle Size: 7 µm	
Size	Item No
150x10 mm	XPtC18P-1510070
250x10 mm	XPtC18P-2510070
100x20 mm	XPtC18P-1020070
150x20 mm	XPtC18P-1520070
250x20 mm	XPtC18P-2520070
100x30 mm	XPtC18P-1030070
150x30 mm	XPtC18P-1530070
250x30 mm	XPtC18P-2530070
100x50 mm	XPtC18P-1050070
150x50 mm	XPtC18P-1550070
250x50 mm	XPtC18P-2550070

Particle Size: 10 µm	
Size	Item No
150 x 10 mm	XPtC18P-15100100
250 x 10 mm	XPtC18P-25100100
100 x 20 mm	XPtC18P-10200100
150 x 20 mm	XPtC18P-15200100
250 x 20 mm	XPtC18P-25200100
100 x 30 mm	XPtC18P-10300100
150 x 30 mm	XPtC18P-15300100
250 x 30 mm	XPtC18P-25300100
100 x 50 mm	XPtC18P-10500100
150 x 50 mm	XPtC18P-15500100
250 x 50 mm	XPtC18P-25500100


## MicroPulite® PHS XP Phenyl- Hexyl Ordering information

Stationary Phase	Bonded Phase	Carbon Percentage	Pore Size	End-capping	Particle Size	USP classification	pH Range	The upper limit of temperature
PHS XP Phenyl- Hexyl		14%	130Å	Mono end-capping	3.5, 5µm	L11	1-11	80°C (Low pH) 45°C (High pH)

### UPLC/UHPLC/HPLC Analytical column for instrument adaptation

Particle Size: 3.5 µm		Particle Size: 5 µm	
Size	Item No	Size	Item No
30 x 2.1 mm	PHSPH-032135	30 x 2.1 mm	PHSPH-032150
50 x 2.1 mm	PHSPH-052135	50 x 2.1 mm	PHSPH-052150
100 x 2.1 mm	PHSPH-102135	100 x 2.1 mm	PHSPH-102150
150 x 2.1 trim	PHSPH-152135	150 x 2.1 mm	PHSPH-152150
30 x 3.0 mm	PHSPH-033035	30 x 3.0 mm	PHSPH-033050
50 x 3.0 mm	PHSPH-053035	50 x 3.0 mm	PHSPH-053050
100 x 3.0 mm	PHSPH-103035	100 x 3.0 mm	PHSPH-103050
150 x 3.0 mm	PHSPH-153035	150 x 3.0 mm	PHSPH-153050
250 x 3.0 mm	PHSPH-253035	250 x 3.0 mm	PHSPH-253050
30 x 4.6 mm	PHSPH-034635	30 x 4.6 mm	PHSPH-034650
50 x 4.6 mm	PHSPH-054635	50 x 4.6 mm	PHSPH-054650
100 x 4.6 mm	PHSPH-104635	100 x 4.6 mm	PHSPH-104650
150 x 4.6 mm	PHSPH-154635	150 x 4.6 mm	PHSPH-154650
250 x 4.6 mm	PHSPH-254635	250 x 4.6 mm	PHSPH-254650

## MicroPulite® PHS XP tF5 Ordering information

Stationary Phase	Bonded Phase	Carbon Percentage	Pore Size	End-capping	Particle Size	USP classification	pH Range	The upper limit of temperature
PHS XP tF5		10%	130Å	-	3.5, 5µm	L43	1-8	60°C (Low pH) 45°C (High pH)

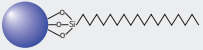
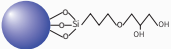

### UPLC/UHPLC/HPLC Analytical column for instrument adaptation

Particle Size: 3.5 µm		Particle Size: 5 µm	
Size	Item No	Size	Item No
30 x 2.1 mm	PHStF5-032135	30 x 2.1 mm	PHStF5-032150
50 x 2.1 mm	PHStF5-052135	50 x 2.1 mm	PHStF5-052150
100 x 2.1 mm	PHStF5-102135	100 x 2.1 mm	PHStF5-102150
150 x 2.1 trim	PHStF5-152135	150 x 2.1 mm	PHStF5-152150
30 x 3.0 mm	PHStF5-033035	30 x 3.0 mm	PHStF5-033050
50 x 3.0 mm	PHStF5-053035	50 x 3.0 mm	PHStF5-053050
100 x 3.0 mm	PHStF5-103035	100 x 3.0 mm	PHStF5-103050
150 x 3.0 mm	PHStF5-153035	150 x 3.0 mm	PHStF5-153050
250 x 3.0 mm	PHStF5-253035	250 x 3.0 mm	PHStF5-253050
30 x 4.6 mm	PHStF5-034635	30 x 4.6 mm	PHStF5-034650
50 x 4.6 mm	PHStF5-054635	50 x 4.6 mm	PHStF5-054650
100 x 4.6 mm	PHStF5-104635	100 x 4.6 mm	PHStF5-104650
150 x 4.6 mm	PHStF5-154635	150 x 4.6 mm	PHStF5-154650
250 x 4.6 mm	PHStF5-254635	250 x 4.6 mm	PHStF5-254650

## MicroPulite® Perfect Series: Balanced retention of polar compounds

Polar analytes can be retained and separated under reverse phase and HILIC conditions; rapid, accurate and reproducible quantification can be achieved with improved retention, sensitivity and excellent peak shape.

- Enhanced retention of polar compounds while maintaining moderate retention of moderately and strongly hydrophobic compounds.
- Advanced bonding and end-capping technology, LC-MS compatible
- Toleration for 100% aqueous mobile phase
- Excellent reproducibility

Stationary Phase	Bonded Phase	Carbon Percentage	Pore Size	Particle Size	USP classification	pH Range	The upper limit of temperature
Perfect T3		14%	100Å	3, 5µm	L1	2-8	45°C (Low pH) 45°C (High pH)
Perfect Diol		15%	130Å	3, 5µm	L20	1-8	60°C (Low pH) 60°C (High pH)
Perfect HILIC		-	120Å	3, 3.5, 5µm	L3	1-5	45°C (Low pH) 45°C (High pH)

### Application case

Column: MicroPulite® Perfect T3 5µm 250\*4.6mm (Item No: PFTT3-254650)

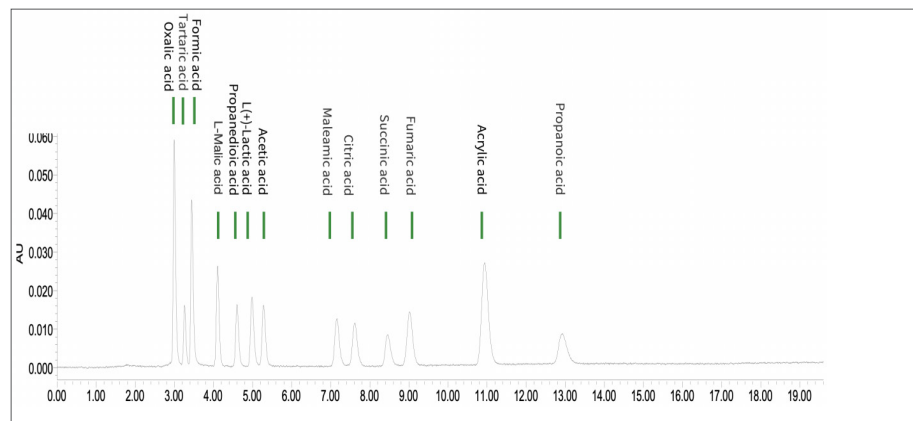
Mobile phase: 0.1% Phosphoric acid solution

Column temperature: 37°C

Injection volume: 10µL

Wavelength: 220nm

Flow rate: 1mL/min



Conclusion: MicroPulite® Perfect T3 has good polarity retention ability and strong tolerance of pure aqueous system. Organic carboxylic acids show excellent peak shape in the analysis of this column, which is the first choice for polar analytes and carboxylic acids liquid chromatography analysis.

## MicroPulite® Perfect T3 Ordering information

Particle Size: 3 µm		Particle Size: 5 µm	
Size	Item No	Size	Item No
30x 2.1 mm	PFTD-032130	30x 2.1 mm	PFTD-032150
50x 2.1 mm	PFTD-052130	50 x 2.1 mm	PFTD-052150
100x 2.1 mm	PFTD-102130	100 x 2.1 mm	PFTD-102150
150x 2.1 mm	PFTD-152130	150x2.1 mm	PFTD-152150
30x 3.0 mm	PFTD-033030	30 x 3.0 mm	PFTD-033050
50x3.0 mm	PFTD-053030	50x 3.0 mm	PFTD-053050
100x3.0 mm	PFTD-103030	100 x 3.0 mm	PFTD-103050
150x 3.0 mm	PFTD-153030	150 x 3.0 mm	PFTD-153050
250x 3.0 mm	PFTD-253030	250 x 3.0 mm	PFTD-253050
30x 4.6 mm	PFTD-034630	30x 4.6 mm	PFTD-034650
50x 4.6 mm	PFTD-054630	50x4.6 mm	PFTD-054650
100x 4.6 mm	PFTD-104630	100 x 4.6 mm	PFTD-104650
150x 4.6 mm	PFTD-154630	150 x 4.6 mm	PFTD-154650
250x 4.6 mm	PFTD-254630	250x 4.6 mm	PFTD-254650

## MicroPulite® Perfect Diol Ordering information

Particle Size: 3 µm		Particle Size: 5 µm	
Size	Item No	Size	Item No
30x 2.1 mm	PFTD-032130	30x 2.1 mm	PFTD-032150
50x 2.1 mm	PFTD-052130	50 x 2.1 mm	PFTD-052150
100x 2.1 mm	PFTD-102130	100 x 2.1 mm	PFTD-102150
150x 2.1 mm	PFTD-152130	150x2.1 mm	PFTD-152150
30x 3.0 mm	PFTD-033030	30 x 3.0 mm	PFTD-033050
50x3.0 mm	PFTD-053030	50x 3.0 mm	PFTD-053050
100x3.0 mm	PFTD-103030	100 x 3.0 mm	PFTD-103050
150x 3.0 mm	PFTD-153030	150 x 3.0 mm	PFTD-153050
250x 3.0 mm	PFTD-253030	250 x 3.0 mm	PFTD-253050
30x 4.6 mm	PFTD-034630	30x 4.6 mm	PFTD-034650
50x 4.6 mm	PFTD-054630	50x4.6 mm	PFTD-054650
100x 4.6 mm	PFTD-104630	100 x 4.6 mm	PFTD-104650
150x 4.6 mm	PFTD-154630	150 x 4.6 mm	PFTD-154650
250x 4.6 mm	PFTD-254630	250x 4.6 mm	PFTD-254650

## MicroPulite® Perfect HILIC Ordering information


Particle Size: 3 µm		Particle Size: 3.5 µm		Particle Size: 5 µm	
Size	Item No	Size	Item No	Size	Item No
30x 2.1 mm	PFTH-032130	30x 2.1 mm	PFTH-032135	30x 2.1 mm	PFTH-032150
50x 2.1 mm	PFTH-052130	50x 2.1 mm	PFTH-052135	50 x 2.1 mm	PFTH-052150
100x 2.1 mm	PFTH-102130	100x 2.1 mm	PFTH-102135	100 x 2.1 mm	PFTH-102150
150x 2.1 mm	PFTH-152130	150x 2.1 mm	PFTH-152135	150x2.1 mm	PFTH-152150
30x 3.0 mm	PFTH-033030	30x 3.0 mm	PFTH-033035	30 x 3.0 mm	PFTH-033050
50x3.0 mm	PFTH-053030	50x3.0 mm	PFTH-053035	50x 3.0 mm	PFTH-053050
100x3.0 mm	PFTH-103030	100x3.0 mm	PFTH-103035	100 x 3.0 mm	PFTH-103050
150x 3.0 mm	PFTH-153030	150x 3.0 mm	PFTH-153035	150 x 3.0 mm	PFTH-153050
250x 3.0 mm	PFTH-253030	250x 3.0 mm	PFTH-253035	250 x 3.0 mm	PFTH-253050
30x 4.6 mm	PFTH-034630	30x 4.6 mm	PFTH-034635	30x 4.6 mm	PFTH-034650
50x 4.6 mm	PFTH-054630	50x 4.6 mm	PFTH-054635	50x4.6 mm	PFTH-054650
100x 4.6 mm	PFTH-104630	100x 4.6 mm	PFTH-104635	100 x 4.6 mm	PFTH-104650
150x 4.6 mm	PFTH-154630	150x 4.6 mm	PFTH-154635	150 x 4.6 mm	PFTH-154650
250x 4.6 mm	PFTH-254630	250x 4.6 mm	PFTH-254635	250x 4.6 mm	PFTH-254650



## MicroPulite® HSS T3: In combination of higher strength silica gel and triple bonding technology

Adopting WePure HSS high-strength silica microspheres and triple bonding technology, the columns can withstand higher pressure range. They are suitable for a wide range of compounds and compatible with 100% aqueous phase. The columns show good tolerance to acidic conditions and extremely low column bleeding. Simultaneously, the unique end-capping technology makes the peak shape more excellent.

- Higher silane affinity, which improves the retention of polar compounds and weakens the retention of highly hydrophobic compounds;
- Designed for rapid method development to shorten the time and save costs;
- Higher mechanical strength, wider selectivity

Stationary Phase	Bonded Phase	Carbon Percentage	Pore Size	Particle Size	USP classification	pH Range	The upper limit of temperature
HSS T3		11%	100Å	1.8, 2.5, 3.5µm	L1	2-8	45°C(Low pH) 45°C(High pH)

### Application case

Method: Quality Standards for Traditional Chinese Medicine Formula Granules in Guizhou Province (Fourth Batch)

Column: MicroPulite® HSS T3 1.8µm 150\*2.1mm

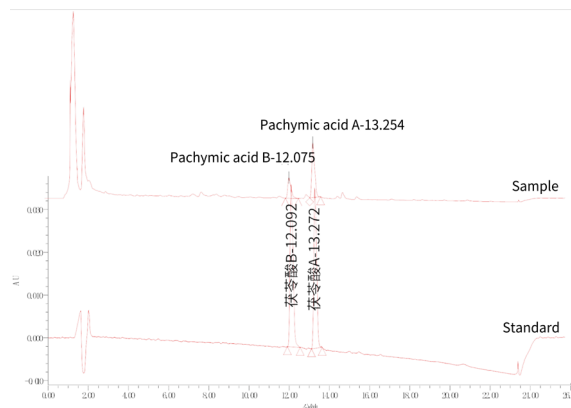
Column temperature: 30°C

Wavelength: UV 252nm

Flow rate: 0.2mL/min

Mobile phase: A:Acetonitrile; B:0.1% Formic acid

t(min)	A%	B%
0	40	60
21	99	1
22	40	60



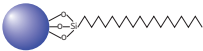
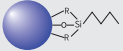


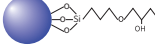
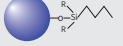
### MicroPulite® HSS T3 Ordering information

#### UPLC/UHPLC/HPLC Analytical column for instrument adaptation

Particle Size: 1.8 µm		Particle Size: 2.5 µm		Particle Size: 3.5 µm	
Size	Item No	Size	Item No	Size	Item No
30 x 2.1 mm	HST3-032118	30 x 2.1 mm	HST3-032125	30 x 2.1 mm	HST3-032135
50 x 2.1 mm	HST3-052118	50 x 2.1 mm	HST3-052125	50 x 2.1 mm	HST3-052135
100 x 2.1 mm	HST3-102118	100 x 2.1 mm	HST3-102125	100 x 2.1 mm	HST3-102135
150 x 2.1 mm	HST3-152118	150 x 2.1 mm	HST3-152125	150 x 2.1 trim	HST3-152135
30 x 3.0 mm	HST3-033018	30 x 3.0 mm	HST3-033025	30 x 3.0 mm	HST3-033035
50 x 3.0 mm	HST3-053018	50 x 3.0 mm	HST3-053025	50 x 3.0 mm	HST3-053035
100 x 3.0 mm	HST3-103018	100 x 3.0 mm	HST3-103025	100 x 3.0 mm	HST3-103035
150 x 3.0 mm	HST3-153018	150 x 3.0 mm	HST3-153025	150 x 3.0 mm	HST3-153035
		250 x 3.0 mm	HST3-253025	250 x 3.0 mm	HST3-253035
		30 x 4.6 mm	HST3-034625	30 x 4.6 mm	HST3-034635
		50 x 4.6 mm	HST3-054625	50 x 4.6 mm	HST3-054635
		100 x 4.6 mm	HST3-104625	100 x 4.6 mm	HST3-104635
		150 x 4.6 mm	HST3-154625	150 x 4.6 mm	HST3-154635
		250 x 4.6 mm	HST3-254625	250 x 4.6 mm	HST3-254635

## BioPulite® Series: Designed for bioseparation

BioPulite® series are based on the same patented and top-notch porous microsphere syntheses technology as other products. Optimized pore structure and leading surface bonding technology provide excellent chromatographic performance for biomolecules. Product performance and reproducibility are further ensured by ISO 9001 strict quality control. This series of columns is suitable for analyses of biomolecules, such as monoclonal antibodies (mAbs) and proteins, and is an effective tool in the fields of biopharmaceuticals, biotechnology and life science research.

Stationary Phase	Bonded Phase	Carbon Percentage	Pore Size	Particle Size	USP classification	pH Range	The upper limit of temperature
XP Protein tC18		12%	300Å	3.5,5µm	L1	1-12	80°C (Low pH) 60°C (High pH)
XP Protein tC4		8%	300Å	3.5, 5µm	L26	1-10	80°C(Low pH) 50°C(High pH)
XP Protein RP18		12%	300Å	3.5,5µm	L1	2-11	50°C (Low pH) 45°C (High pH)
XP Protein RP18 Plus		17%	300Å	3.5,5µm	L1	2-11	50°C (Low pH) 45°C (High pH)
XP SEC-125		12%	125Å	5µm	L33	2.5-8	60°C (Low pH) 60°C (High pH)
Gold Protein C4		1.3%	300Å	3,5µm	L26	1-10	80°C (Low pH) 50°C (High pH)

### Application case

#### Analyzing Different Lipids in Lipid Nanoparticles

Method: Journal of Chromatography A 1709(2023)464375

Column: BioPulite® XP Protein tC18 3.5µm 250\*4.6mm

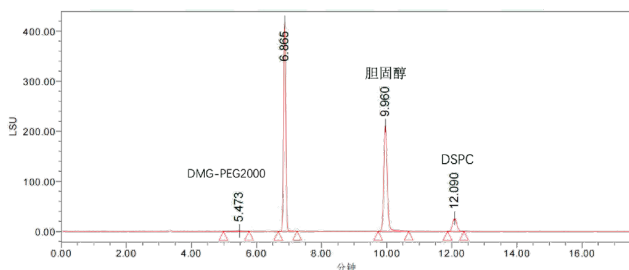
Column temperature: 65°C

Detector: ELSD=50°C

Flow rate: 1.2mL/min


Mobile phase: Methanol: 200mmol/L Ammonium formate= (96:4)

Chromatogram:



	Substance	Retention time(min)	Area (µv*s)	Height (µv)	USP Separability	USP tailing	USP theoretical plate numbers
1	DMG-PEG2000	5.473	20552	956	-	0.80	1398.67
2	SM102	6.865	1933990	418151	4.00	1.02	53421.98
3	Cholesterol	9.960	1568694	211165	19.86	1.13	42710.72
4	DSPC	12.090	237178	26351	10.04	1.05	41309.45

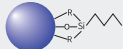
## BioPulite® XP Protein tC18 300Å Ordering information

Stationary Phase	Bonded Phase	Carbon Percentage	Pore Size	End-capping	Particle Size	USP classification	pH Range	The upper limit of temperature
XP Protein tC18		12%	300Å	Dual end-capping	3.5,5µm	L1	1-12	80°C (Low pH) 60°C (High pH)

Particle Size: 3.5 µm	
Size	Item No
30 x 2.1 mm	XPtC18-300-032135
50 x 2.1 mm	XPtC18-300-052135
100 x 2.1 mm	XPtC18-300-102135
150 x 2.1 trim	XPtC18-300-152135
30 x 3.0 mm	XPtC18-300-033035
50 x 3.0 mm	XPtC18-300-053035
100 x 3.0 mm	XPtC18-300-103035
150 x 3.0 mm	XPtC18-300-153035
250 x 3.0 mm	XPtC18-300-253035
30 x 4.6 mm	XPtC18-300-034635
50 x 4.6 mm	XPtC18-300-054635
100 x 4.6 mm	XPtC18-300-104635
150 x 4.6 mm	XPtC18-300-154635
250 x 4.6 mm	XPtC18-300-254635

Particle Size: 5 µm	
Size	Item No
30 x 2.1 mm	XPtC18-300-032150
50 x 2.1 mm	XPtC18-300-052150
100 x 2.1 mm	XPtC18-300-102150
150 x 2.1 mm	XPtC18-300-152150
30 x 3.0 mm	XPtC18-300-033050
50 x 3.0 mm	XPtC18-300-053050
100 x 3.0 mm	XPtC18-300-103050
150 x 3.0 mm	XPtC18-300-153050
250 x 3.0 mm	XPtC18-300-253050
30 x 4.6 mm	XPtC18-300-034650
50 x 4.6 mm	XPtC18-300-054650
100 x 4.6 mm	XPtC18-300-104650
150 x 4.6 mm	XPtC18-300-154650
250 x 4.6 mm	XPtC18-300-254650

## BioPulite® XP Protein tC4 300Å Ordering information

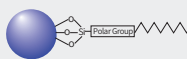
Stationary Phase	Bonded Phase	Carbon Percentage	Pore Size	End-capping	Particle Size	USP classification	pH Range	The upper limit of temperature
XP Protein tC4		8%	300Å	Dual end-capping	3.5, 5µm	L26	1-12	80°C(Low pH) 50°C(High pH)

## UPLC/UHPLC/HPLC Analytical column for instrument adaptation

Particle Size: 3.5 µm	
Size	Item No
30 x 2.1 mm	XPtC4-300-032135
50 x 2.1 mm	XPtC4-300-052135
100 x 2.1 mm	XPtC4-300-102135
150 x 2.1 trim	XPtC4-300-152135
30 x 3.0 mm	XPtC4-300-033035
50 x 3.0 mm	XPtC4-300-053035
100 x 3.0 mm	XPtC4-300-103035
150 x 3.0 mm	XPtC4-300-153035
250 x 3.0 mm	XPtC4-300-253035
30 x 4.6 mm	XPtC4-300-034635
50 x 4.6 mm	XPtC4-300-054635
100 x 4.6 mm	XPtC4-300-104635
150 x 4.6 mm	XPtC4-300-154635
250 x 4.6 mm	XPtC4-300-254635

Particle Size: 5 µm	
Size	Item No
30 x 2.1 mm	XPtC4-300-032150
50 x 2.1 mm	XPtC4-300-052150
100 x 2.1 mm	XPtC4-300-102150
150 x 2.1 mm	XPtC4-300-152150
30 x 3.0 mm	XPtC4-300-033050
50 x 3.0 mm	XPtC4-300-053050
100 x 3.0 mm	XPtC4-300-103050
150 x 3.0 mm	XPtC4-300-153050
250 x 3.0 mm	XPtC4-300-253050
30 x 4.6 mm	XPtC4-300-034650
50 x 4.6 mm	XPtC4-300-054650
100 x 4.6 mm	XPtC4-300-104650
150 x 4.6 mm	XPtC4-300-154650
250 x 4.6 mm	XPtC4-300-254650

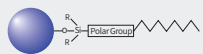
## BioPulite® XP Protein RP18 300Å Ordering information

Stationary Phase	Bonded Phase	Carbon Percentage	Pore Size	End-capping	Particle Size	USP classification	pH Range	The upper limit of temperature
XP Protein RP18		12%	300Å	Dual end-capping	3.5,5µm	L1	2-11	50°C(Low pH) 45°C(High pH)

Particle Size: 3.5µm	
Size	Item No
30 x 2.1 mm	XPR18-300-032135
50 x 2.1 mm	XPR18-300-052135
100 x 2.1 mm	XPR18-300-102135
150 x 2.1 trim	XPR18-300-152135
30 x 3.0 mm	XPR18-300-033035
50 x 3.0 mm	XPR18-300-053035
100 x 3.0 mm	XPR18-300-103035
150 x 3.0 mm	XPR18-300-153035
250 x 3.0 mm	XPR18-300-253035
30 x 4.6 mm	XPR18-300-034635
50 x 4.6 mm	XPR18-300-054635
100 x 4.6 mm	XPR18-300-104635
150 x 4.6 mm	XPR18-300-154635
250 x 4.6 mm	XPR18-300-254635

Particle Size: 5 µm	
Size	Item No
30 x 2.1 mm	XPR18-300-032150
50 x 2.1 mm	XPR18-300-052150
100 x 2.1 mm	XPR18-300-102150
150 x 2.1 mm	XPR18-300-152150
30 x 3.0 mm	XPR18-300-033050
50 x 3.0 mm	XPR18-300-053050
100 x 3.0 mm	XPR18-300-103050
150 x 3.0 mm	XPR18-300-153050
250 x 3.0 mm	XPR18-300-253050
30 x 4.6 mm	XPR18-300-034650
50 x 4.6 mm	XPR18-300-054650
100 x 4.6 mm	XPR18-300-104650
150 x 4.6 mm	XPR18-300-154650
250 x 4.6 mm	XPR18-300-254650

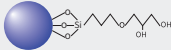
## BioPulite® XP Protein RP18 Plus 300Å Ordering information

Stationary Phase	Bonded Phase	Carbon	Pore Size	End-capping	Particle Size	USP classification	pH Range	The upper limit of temperature
XP Protein RP18 Plus		17%	300Å	Dual end-capping	3.5,5µm	L1	2-11	50°C(Low pH) 45°C(High pH)

Particle Size: 3.5µm	
Size	Item No
30 x 2.1 mm	XPR18P-300-032135
50 x 2.1 mm	XPR18P-300-052135
100 x 2.1 mm	XPR18P-300-102135
150 x 2.1 trim	XPR18P-300-152135
30 x 3.0 mm	XPR18P-300-033035
50 x 3.0 mm	XPR18P-300-053035
100 x 3.0 mm	XPR18P-300-103035
150 x 3.0 mm	XPR18P-300-153035
250 x 3.0 mm	XPR18P-300-253035
30 x 4.6 mm	XPR18P-300-034635
50 x 4.6 mm	XPR18P-300-054635
100 x 4.6 mm	XPR18P-300-104635
150 x 4.6 mm	XPR18P-300-154635
250 x 4.6 mm	XPR18P-300-254635

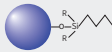
Particle Size: 5 µm	
Size	Item No
30 x 2.1 mm	XPR18P-300-032150
50 x 2.1 mm	XPR18P-300-052150
100 x 2.1 mm	XPR18P-300-102150
150 x 2.1 mm	XPR18P-300-152150
30 x 3.0 mm	XPR18P-300-033050
50 x 3.0 mm	XPR18P-300-053050
100 x 3.0 mm	XPR18P-300-103050
150 x 3.0 mm	XPR18P-300-153050
250 x 3.0 mm	XPR18P-300-253050
30 x 4.6 mm	XPR18P-300-034650
50 x 4.6 mm	XPR18P-300-054650
100 x 4.6 mm	XPR18P-300-104650
150 x 4.6 mm	XPR18P-300-154650
250 x 4.6 mm	XPR18P-300-254650

## BioPulite® XP SEC 125Å Ordering information

Stationary Phase	Bonded Phase	Carbon Percentage	Pore Size	End-capping	Particle Size	USP classification	pH Range	The upper limit of temperature
XP SEC-125		12%	125Å	-	5µm	L33	2.5-8	60°C (Low pH) 60°C (High pH)

Particle Size: 5µm	
Size	Item No
30 x 2.1 mm	XPS-125-032150
50 x 2.1 mm	XPS-125-052150
100 x 2.1 mm	XPS-125-102150
150 x 2.1 mm	XPS-125-152150
30 x 3.0 mm	XPS-125-033050
50 x 3.0 mm	XPS-125-053050
100 x 3.0 mm	XPS-125-103050
150 x 3.0 mm	XPS-125-153050
250 x 3.0 mm	XPS-125-253050
30 x 4.6 mm	XPS-125-034650
50 x 4.6 mm	XPS-125-054650
100 x 4.6 mm	XPS-125-104650
150 x 4.6 mm	XPS-125-154650
250 x 4.6 mm	XPS-125-254650

## BioPulite® Gold Protein C4 300Å Ordering information

Stationary Phase	Bonded Phase	Carbon Percentage	Pore Size	Particle Size	USP classification	pH Range	The upper limit of temperature
Gold Protein C4		1.3%	300Å	5µm	L26	2-8	60°C (Low pH) 50°C (High pH)

Particle Size: 3 µm	
Size	Item No
30x 2.1 mm	GDC4-300-032130
50 x 2.1 mm	GDC4-300-052130
100 x 2.1 mm	GDC4-300-102130
150x2.1 mm	GDC4-300-152130
30 x 3.0 mm	GDC4-300-033030
50x 3.0 mm	GDC4-300-053030
100 x 3.0 mm	GDC4-300-103030
150 x 3.0 mm	GDC4-300-153030
250 x 3.0 mm	GDC4-300-253030
30x 4.6 mm	GDC4-300-034630
50x4.6 mm	GDC4-300-054630
100 x 4.6 mm	GDC4-300-104630
150 x 4.6 mm	GDC4-300-154630
250x 4.6 mm	GDC4-300-254630

Particle Size: 5 µm	
Size	Item No
30x 2.1 mm	GDC4-300-032150
50 x 2.1 mm	GDC4-300-052150
100 x 2.1 mm	GDC4-300-102150
150x2.1 mm	GDC4-300-152150
30 x 3.0 mm	GDC4-300-033050
50x 3.0 mm	GDC4-300-053050
100 x 3.0 mm	GDC4-300-103050
150 x 3.0 mm	GDC4-300-153050
250 x 3.0 mm	GDC4-300-253050
30x 4.6 mm	GDC4-300-034650
50x4.6 mm	GDC4-300-054650
100 x 4.6 mm	GDC4-300-104650
150 x 4.6 mm	GDC4-300-154650
250x 4.6 mm	GDC4-300-254650

## MicroPulite® Peptide Series: Designed for peptide separation

Adopting patented hybrid silica gel with a wide pH range, triple bond modification technology, and unique dual end-capping method, it is possible to efficient separation of peptides, peptides, and small molecule proteins within the range of pH 1-12 while maintaining their activity. Under high pH conditions, excellent recovery rates can be achieved.

- Compatible with 100% aqueous phase
- Meet the selective separation needs of peptides with various properties
- Different pore size fillers meet the separation requirements of samples in various molecular weight ranges
- High column efficiency, excellent peak shape, and good inter batch stability

Stationary Phase	Bonded Phase	Carbon Percentage	Pore Size	End-capping	Particle Size	USP classification	pH range
Peptide XP	tC18	18%	130Å	Dual end-capping	1.7、 2.5、 3.5、 5µm	L1	1-12
Peptide PHS XP	tC18	15%	130Å	Dual end-capping	1.7、 2.5、 3.5、 5µm	L1	1-11
Peptide HSS	T3	11%	100Å	Dual end-capping	1.8、 2.5、 3.5、 5µm	L1	1-8

### Application case

#### Sample Information:

Angiotensinogen (1-7) DRVYIHP, Bradykinin RPPGFSPFR, Angiotensin I DRVYIHPFHL, Angiotensin II DRVYIHPF

#### Detection conditions:

Wavelength=220nm

Mobile phase A 0.1% TFA water

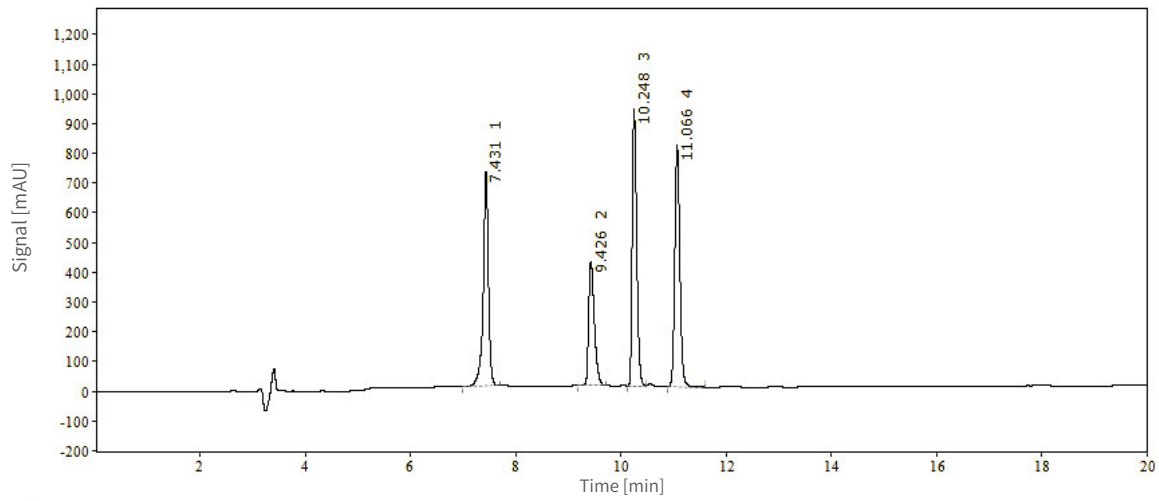
Mobile phase B 0.1% TFA acetonitrile

#### Chromatographic Column:

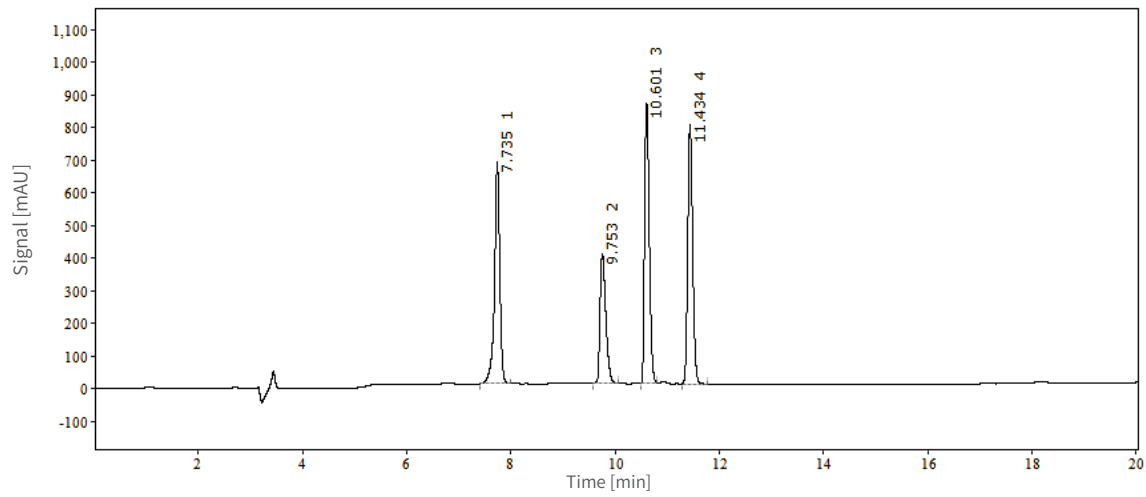
MicroPulite® Peptide XP tC18 4.6\*250mm

MicroPulite® Peptide XP T3 4.6\*250mm

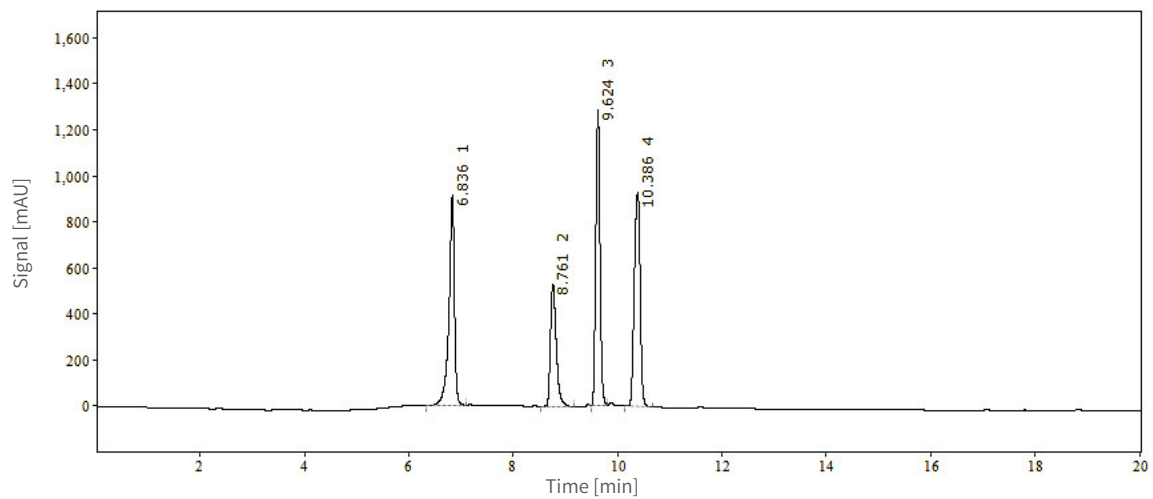
MicroPulite® Peptide PHS tC18 4.6\*250mm



MicroPulite® Peptide XP tC18 Mixed standard



MicroPulite® Peptide XP T3 Mixed standard



MicroPulite® Peptide PHS tC18 Mixed standard

## WeChromlite® Series Guard Column

Guard Column, which is a short column (5-30mm long) connected to the inlet of the analysis column and equipped with the same stationary phase as the analysis column. Its main function is to remove solid particle pollutants and chemical pollutants from the chromatographic system, sample, and mobile phase, while maintaining the performance of the chromatographic column and extending its service life as much as possible.

WePure Biotech provide Guard Column connectors with simple structure, convenient use, small connection volume, and convenient disassembly, suitable for analysis of complex samples in formulations、 traditional Chinese medicine、 food、 environment and other fields.

**Split Guard Column:** Compared to the analysis column, it is independent and needs to be connected to the analysis column through joints and connecting pipelines. Users can also choose appropriate protective column lengths and core fillers based on different samples. Its advantages are flexible installation and less prone to malfunctions.

**Directly connected Guard Column:** Can be directly installed on the chromatographic column without the need for additional pipelines or connectors. Its advantages are convenient use and small dead volume outside the column.



Product	pH	Packing Type	Particle Size (μm)	Specification (mm)	Item No
WeChromlite® Series Guard Column core	1-12	XP tC18	2.5μm	2.1*4	GC-XPtC18-214025-3P
				3*4	GC-XPtC18-304025-3P
				4.6*10	GC-XPtC18-4610025-3P
			3μm	2.1*4	GC-XPtC18-214030-3P
				3*4	GC-XPtC18-304030-3P
				4.6*10	GC-XPtC18-4610030-3P
			3.5μm	2.1*4	GC-XPtC18-214035-3P
				3*4	GC-XPtC18-304035-3P
				4.6*10	GC-XPtC18-4610035-3P
			5μm	2.1*4	GC-XPtC18-214050-3P
				3*4	GC-XPtC18-304050-3P
				4.6*10	GC-XPtC18-4610050-3P
				10*10	GC-XPtC18-10010050-1P
				20*10	GC-XPtC18-20010050-1P
				30*10	GC-XPtC18-30010050-1P
			7μm	10*10	GC-XPtC18-10010070-1P
				20*10	GC-XPtC18-20010070-1P
				30*10	GC-XPtC18-30010070-1P
	10μm	10*10	GC-XPtC18-100100100-1P		
		20*10	GC-XPtC18-200100100-1P		
		30*10	GC-XPtC18-300100100-1P		
	2-8	Gold C18	3μm	2.1*4	GC-GDC18-214030-3P
				3*4	GC-GDC18-304030-3P
				4.6*10	GC-GDC18-4610030-3P
			3.5μm	2.1*4	GC-GDC18-214035-3P
				3*4	GC-GDC18-304035-3P
				4.6*10	GC-GDC18-4610035-3P
			5μm	2.1*4	GC-GDC18-214050-3P
				3*4	GC-GDC18-304050-3P
				4.6*10	GC-GDC18-4610050-3P
				10*10	GC-GDC18-10010050-1P
				20*10	GC-GDC18-20010050-1P
				30*10	GC-GDC18-30010050-1P
			7μm	10*10	GC-GDC18-10010070-1P
				20*10	GC-GDC18-20010070-1P
				30*10	GC-GDC18-30010070-1P
10μm			10*10	GC-GDC18-100100100-1P	
			20*10	GC-GDC18-200100100-1P	
			30*10	GC-GDC18-300100100-1P	



WeChromlite® Series Guard Column core	1-8	HSS T3	2.5µm	2.1*4	GC-HST3-214025-3P
				3*4	GC-HST3-304025-3P
				4.6*10	GC-HST3-4610025-3P
			3.5µm	2.1*4	GC-HST3-214035-3P
				3*4	GC-HST3-304035-3P
				4.6*10	GC-HST3-4610035-3P
	2-8	Perfect T3	3µm	2.1*4	GC-PFT3-214030-3P
				3*4	GC-PFT3-304030-3P
				4.6*10	GC-PFT3-4610030-3P
			5µm	2.1*4	GC-PFT3-214050-3P
				3*4	GC-PFT3-304050-3P
				4.6*10	GC-PFT3-4610050-3P
				10*10	GC-PFT3-10010050-1P
				20*10	GC-PFT3-20010050-1P
				30*10	GC-PFT3-30010050-1P
			7µm	10*10	GC-PFT3-10010070-1P
20*10				GC-PFT3-20010070-1P	
30*10				GC-PFT3-30010070-1P	
10µm	10*10	GC-PFT3-100100100-1P			
	20*10	GC-PFT3-200100100-1P			
	30*10	GC-PFT3-300100100-1P			

Product	Operating Pressure (Mpa)	Specifications (mm)	Item No
WeChromlite® Series Guard Column sleeve	120	2.1	GC-21
	60	3.0	GC-30
	40	4.6	GC-46
	40	10	GC-100
	40	20	GC-200
	40	30	GC-300

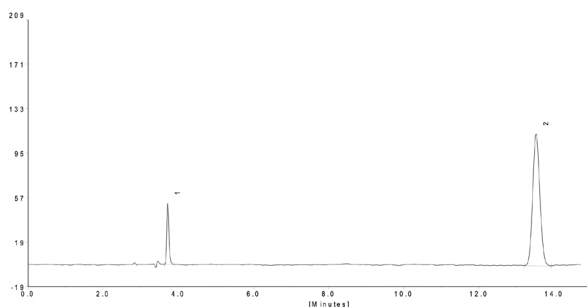
\*The column core needs to be purchased separately according to the type of chromatographic column and used with corresponding specifications of column sleeves.

## HPLC Guard Column

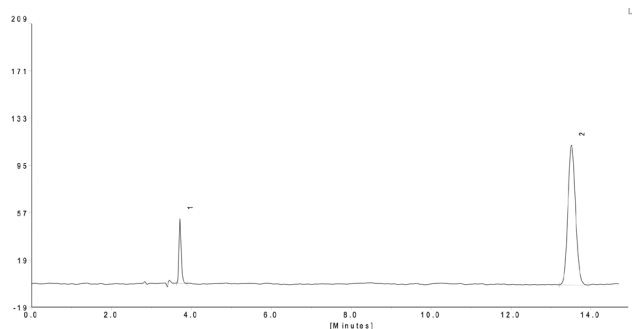
- Extending the lifespan of chromatographic columns
- The chromatographic results showed almost no change
- Easy to use

Description	Specifications	Backpressure	Efficiency	Peak Asym
MicroPulite® XP tC18	4.6*250 mm, 5µm	6.7MPa (Using Guard Column)	102333.67	1.09
		6.5 MPa (Out of use Guard Column)	96362.56	1.10
Chromatographic conditions Mobile phase : A: 0.1% TFA water B: 0.1% TFA acetonitrile Velocity of flow: 0.8 mL/min Temperature: 25 °C Wavelength: 254 nm				

Using Guard Column Pressure: 6.7MPa



Out of use Guard Column Pressure: 6.5 MPa



## PrePulite® Preparative LC Packing Media

WePure Biotech has patented technology for preparative LC packing media, and stably produces and supplies various bonded phase products with particle sizes ranging from 10µm to 100µm according to ISO 9001 strict quality control standards. WePure provides seamless connections for biopharmaceuticals from laboratory development, small-scale testing to industrial scale preparation.

PrePulite® Preparative LC Packing Media								
Packing Media Type	Particle Size (µm)	Pore Size (Å)	Pore Volume (ml/g)	Specific Surface Area (m <sup>2</sup> /g)	Bonded Phase	End-capping	Carbon Percentage (wt%)	Item No
Gold	10/20	120	0.9	300	C18	Yes	18%	G10-12-C18-F1 G20-12-C18-F1
	10/20	120	0.9	300	C8	Yes	12%	G10-12-CO8-F1 G20-12-CO8-F1
	10/20	100	1.0	300	C18	Yes	20%	G10-10-C18-F1 G20-10-C18-F1
XP	10/20	130	0.7	185	C18	Yes	20%	X10-13-C18-F1 X20-13-C18-F1
	10/20	130	0.7	185	tC18	Dual End-capping	18%	X10-13-t18-F2 X20-13-t18-F2
	10/20	130	0.7	185	C8	Yes	14%	X10-13-CO8-F1 X20-13-CO8-F1
	10/20	130	0.7	185	tC8	Dual End-capping	13%	X10-13-t08-F2 X20-13-t08-F2
	10/20	130	0.7	185	T3	Dual End-capping	14%	X10-13-T03-F2 X20-13-T03-F2
HLB	50/70/120	100	1.20	800	HLB	N/A	N/A	HLB050 HLB070 HLB120
MCX	50/70/120	100	1.20	800	HLB	N/A	N/A	MCX050 MCX070 MCX120
MAX	50/70/120	100	1.20	800	HLB	N/A	N/A	MAX050 MAX070 MAX120
WCX	50/70/120	100	1.20	800	HLB	N/A	N/A	WCX050 WCX070 WCX120

## Upulite® Sample-Prep Packing Media

Upulite® sample-prep packing media are manufactured in the same procedures as HPLC & UPLC packing media. Perfectly spherical particles, outstanding mechanical strength, extremely low metal content with HPLC grade quality control ensure the produces excellent performance and reproductivity. WePure Biotech's provides various sample-prep packing media. Silica-based media, which are all spherical, include silica and silica surface functionalized with NH<sub>2</sub>, PSA, C18 and other bonding phases. PS-DVB-based media, include HLB series and four ionic phases. SiZ serie are exclusively provided by WePure Biotech, which show great advantages in removing phospholipids, fats in complicated sample matrices.

Packing Media Type	Characteristics and Usage
HLB	Reverse phase adsorbent with hydrophilic lipophilic balance and water wettability, with high retention performance and reproducibility, making it very suitable for acidic, alkaline, and neutral analytes.
HLB Pro	Mainly used to remove phospholipids and fats.
MCX	Mixed strong cationic and reverse phase adsorbent.
MAX	Mixed strong anionic and reverse phase adsorbent.
WCX	Mixed weak cationic and reverse phase adsorbent.
WAX	Mixed weak anionic and reverse phase adsorbent.
Silica	Strongly polar normal phase adsorbent can retain polar compounds in the sample, with good reproducibility and high recovery rate.
Silica-NH <sub>2</sub>	Aminopropyl bonded spherical silica gel exhibits strong polar adsorption and weak anion exchange retention in non-polar organic solvents.
Silica-PSA	Weak anion exchange and positive phase retention. Di-amino groups provide greater ion exchange capacity. PSA can form complexes with metal ions and retain certain metal ions.
Silica-C18	Strong hydrophobic interactions retain non polar compounds. It can retain most organic matter and is widely used in fields such as environment and food safety.
SiZ	Mainly used to remove phospholipids and fats.

Packing Media Type	Particle Size	Item No
HLB	40µm	HLB040
	70µm	HLB070
HLB Pro	40µm	HLBP040
	70µm	HLBP070
MCX	40µm	MCX040
	70µm	MCX070
MAX	40µm	MAX040
	70µm	MAX070
WCX	40µm	WCX040
	70µm	WCX070
WAX	40µm	P06-40
	70µm	P06-70
Silica	70µm	C00070
Silica-C18	70µm	C18070
Silica-PSA	70µm	PSA070
Silica-NH <sub>2</sub>	70µm	NH070
SiZ	70µm	SiZ070

## Buffer Range, LC- MS Com patibility,and Cutoff Wave length of Common Buffers

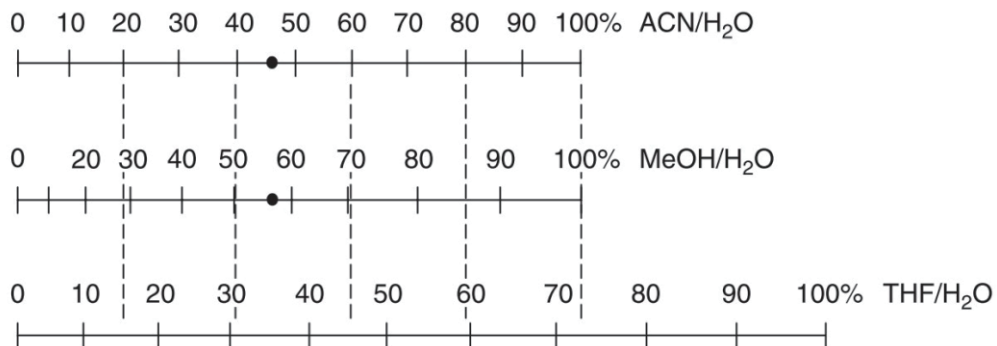
Buffering agent	pH buffer range	LC-MS compatibility	UV cutoff wavelength
Phosphate( $pK_1$ )	1.1-3.1	NO	<200 nm
Phosphate( $pK_1$ )	6.2-8.2		
Phosphate( $pK_1$ )	11.3-13.3		
Acetate	3.8-5.8	YES	210 nm (10 mm)
Citrate( $pK_1$ )	2.1-4.1	NO	230 nm (10 mm)
Citrate( $pK_2$ )	3.7-5.7		
Citrate( $pK_3$ )	4.4-6.4		
Trifuracetio Acid (0.1%)	2.0	YES	210 nm
Phosphoric Acid (0.1%)	2.0	NO	<200 nm
Formic Acid (0.1%)	2.7	YES	210 nm
Ammonium Formate	2.7-4.7	YES	210 nm (10 mm)
Supercarbonate	5.4-7.4	YES (Ammonium)	200 nm
Carbonate	9.2-11.2	NO (Nak etc)	
Borate	8.3-10.3	NO	190 nm
Ammonium	8.2-10.2	YES	200 nm (10 mm)
Diethylammonium	9.5-11.5	NO	235 nm (10 mm)
Triethylammonium	9.7-11.7	NO	<200 nm (10 mm)
Trometamol	7.3-9.3	NO	205 nm (10 mm)

## Common solvent mixing table

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31		
	Acetic acid	Acetone	Acetonitrile	Bbenzene	N-butanol	Carbon tetroxide	Chloroform	Cyclohexane	Cyclopentane	Dichloroethane	Dichloromethane	Dimethylformamide	Dimethyl sulfoxide	Dioxane	Ethyl acetate	Ethanol	Ethyl ether	Heptane	N-hexane	Methanol	Methyl ethyl ketone	Isooctane	N-pentane	Propan-2-ol	2-propanol	Tetrachloroethane	Tetrahydrofuran	Toluene	Trichloroethane	Water	Xylenes		
1	Acetic acid																															Acetic acid	
2	Acetone																																Acetone
3	Acetonitrile																																Acetonitrile
4	Bbenzene																																Bbenzene
5	N-butanol																																N-butanol
6	Carbon tetroxide																																Carbon tetroxide
7	Chloroform																																Chloroform
8	Cyclohexane																																Cyclohexane
9	Cyclopentane																																Cyclopentane
10	Dichloroethane																																Dichloroethane
11	Dichloromethane																																Dichloromethane
12	Dimethylformamide																																Dimethylformamide
13	Dimethyl sulfoxide																																Dimethyl sulfoxide
14	Dioxane																																Dioxane
15	Ethyl acetate																																Ethyl acetate
16	Ethanol																																Ethanol
17	Ethyl ether																																Ethyl ether
18	Heptane																																Heptane
19	N-hexane																																N-hexane
20	Methanol																																Methanol
21	Methyl ethyl ketone																																Methyl ethyl ketone
22	Isooctane																																Isooctane
23	N-pentane																																N-pentane
24	Propan-2-ol																																Propan-2-ol
25	2-propanol																																2-propanol
26	Tetrachloroethane																																Tetrachloroethane
27	Tetrahydrofuran																																Tetrahydrofuran
28	Toluene																																Toluene
29	Trichloroethane																																Trichloroethane
30	Water																																Water
31	Xylenes																																Xylenes

Immiscibility     
  Mutually dissolvable

### Comparison of solvent strength between Acetonitrile (ACN) 、Methanol (MeOH) and Tetrahydrofuran (THF)



## Common solvent properties

Solvent	Cutoff wavelength(nm) <sup>a</sup>	Refractivity RI <sup>b</sup>	Viscosity(cP)	Boiling point(°C) <sup>c</sup>	ε (silica) <sup>d</sup>
Acetone	330	1.359	0.36	56	0.53
Acetonitrile	190	1.344	0.38	82	0.52
n-Butanol	215	1.399	2.98	118	0.40
1-Oxymethanol	220	1.402	0.45	78	0.20
Chloroform	245	1.446	0.57	61	0.26
Cyclohexane	200	1.424	1.00	81	0.00
Dimethylformamide	268	1.430	0.92	153	
Dimethyl sulfoxide	268	1.478	2.24	189	0.50
1,4-Dioxane	215	1.422	1.37	101	0.51
Ethyl acetate	256	1.372	0.45	77	0.48
Heptane	200	1.388	0.40	98	0.00
n-Hexane	195	1.375	0.31	69	0.00
Isooctane	215	1.391	0.50	99	0.00
Methanol	205	1.328	0.55	65	0.70
Methyl tert-butyl ether	210	1.369	0.27	55	0.48
Methyl ethyl ketone	329	1.379	0.43	80	0.40
Dichloromethane	233	1.424	0.44	40	0.30
Propan-2-ol	205	1.377	2.40	82	0.60
n-Propanol	210	1.386	2.30	97	0.60
Tetrahydrofuran	212	1.407	0.55	66	0.53
Toluene	284	1.497	0.59	111	0.22
Water	190	1.333	1.00	100	

a. The solvent absorption value is 1.0 Au, The wavelength of the detection pool is 10 mm

b. Index of refraction

c. Boiling Point

d. Solvent strength parameters



## ISO 9001 Certificate of WePure Biotech



“WePure” WeChat Official



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