

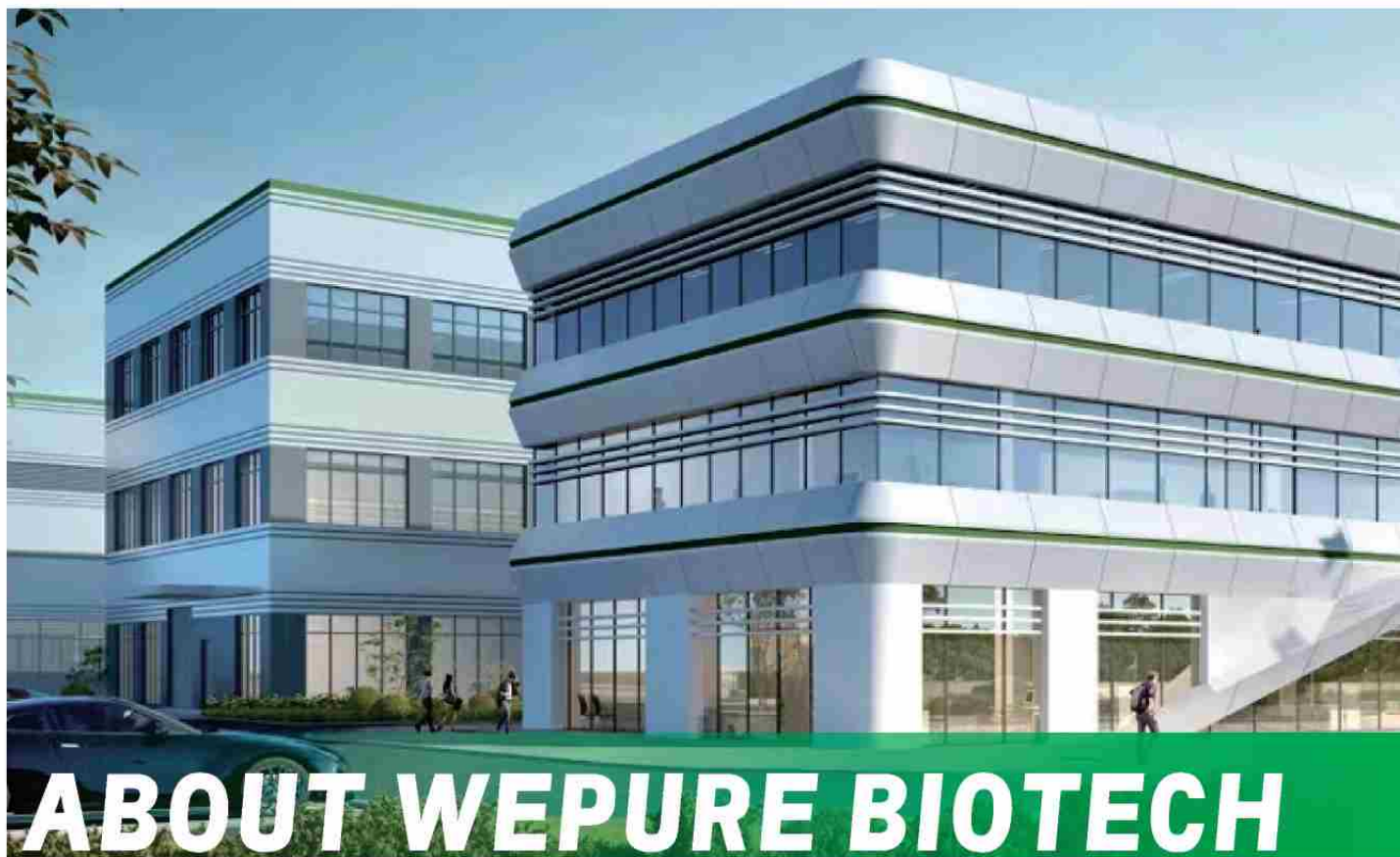


WE PURE
微纯生物科技

MicroPulite®

**Liquid Phase Analytical Chromatography
Packing Media and Analytical Column
Product Manual**

微纯生物科技(广州)有限公司
WePure Biotech (Guangzhou) Co., Ltd.



WePure Biotech a National High-Tech Enterprise and a Guangzhou Specialized, Refined, Distinctive, and Innovative Enterprise, dedicated to "Becoming an excellent supplier of Global Analysis, Testing, Separation & Purification Solution".

The company's main products include MicroPulite' analytical Columns, BioPulite' Bioanalytical column, PrePulite' SemiPrep Columns/Semi-prep and industrial Preparative Material, Upulite' Sample Pre-Prep Packing Media/SPE, and WeChromlite' Guard Column of analytical /Semi-Prep column.

As one of the few global manufacturers with comprehensive expertise in both silica-based and resin-based chromatographic filler production technologies, our team brings over 20 years of industry experience and extensive application development knowledge. We maintain a complete industrial chain, from raw material synthesis (silica/resin microspheres) to internationally advanced surface bonding/modification processes, and production of analytical/semi-prep columns and preparative Packing Media. We provide high-quality, cost-effective, stable-supply, and fast-delivery products and services to industries such as pharmaceutical manufacturing, biotechnology, food safety, chemical production, and environmental testing.

Our facilities include:

- A 1,950 m² R&D, production, and application development base in the Guangdong Medical Valley National Incubation Park (Nansha, Guangzhou).
- A subsidiary with a 5,000 m² plant for large-scale production of preparative chromatographic packing media.
- A 26,000 m² self-built production base in the Wengyuan Innovation API Industrial Park (Guangdong), launched in December 2023, expected to commence operations in Q1 2026. This facility will produce 25,000 kg of silica-based fillers, 10,000 kg of resin-based packing media, and 50 tons of functional microsphere materials annually.



"WePure" Headquarter located in Guangdong



"WePure" production base in Foshan



"WePure" production base in Shaoguan Guangdong



3 WePure Biotech's three technology platforms

■ Stable porous microsphere syntheses technology

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

■ Advanced surface modification technology

WePure provides triple bond C18/C8, double bond C18/C8, single bond C18/C8, NH₂, Amide, Hexyl-Phenyl, Fluoro-Phenyl (PFP), Diol, RP18/18 Plus, PHS charged modification technology, unique T3 bond technology, mix mode bond technology, meet the needs of analysis, separation and purification.

■ High efficient and stable columns packing platform

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

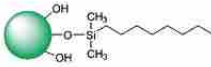
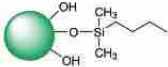
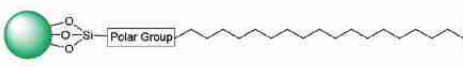
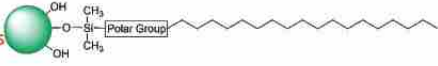
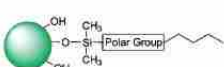
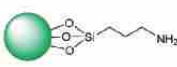
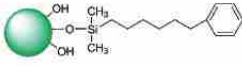
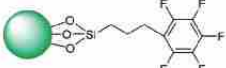
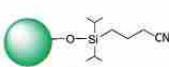
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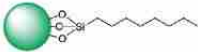
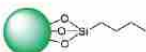
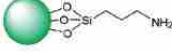
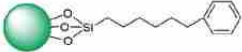
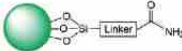
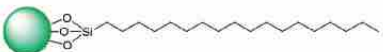
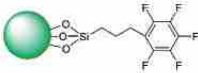
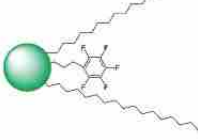


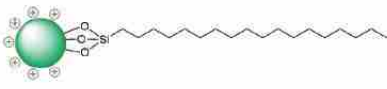
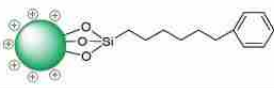
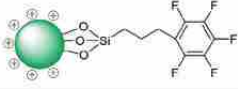
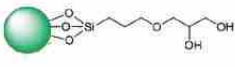
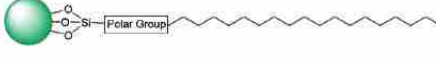
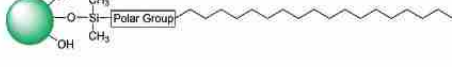
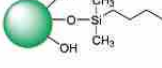
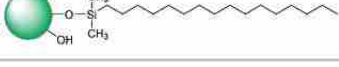
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Columns Parameter Guide

Column Series	Stationary Phase	Bonded Phase	Carbon Load	Surface area	End-capped	Pore Size	Particle Size	USP Classification	pH range	Temperature limit
MicroPulite® Gold	C18		18%	300	Yes	120Å	3, 3.5, 5, 10µm	L1	2-8	60°C (Low pH) 40°C (High pH)
	C8		12%	300	Yes	120Å	3, 3.5, 5, 10µm	L7	2-8	60°C (Low pH) 40°C (High pH)
	C4		3.9%	300	Yes	120Å	3, 3.5, 5, 10µm	L26	2-8	60°C (Low pH) 40°C (High pH)
	RP18		20%	300	Yes	120Å	3, 3.5, 5, 10µm	L1	1-8	60°C (Low pH) 40°C (High pH)
	RP18 Plus		17%	300	Yes	120Å	3, 3.5, 5, 10µm	L1	2-8	60°C (Low pH) 40°C (High pH)
	RP8 Plus		15%	300	Yes	120Å	3, 3.5, 5µm	L7	2-8	60°C (Low pH) 40°C (High pH)
	RP4 Plus		3.9%	300	Yes	120Å	3, 3.5, 5µm	L26	2-8	60°C (Low pH) 40°C (High pH)
	NH ₂		3.8%	300	No	120Å	3, 3.5, 5µm	L8	2-8	60°C (Low pH) 40°C (High pH)
	HILIC		-	300	No	120Å	3, 3.5, 5, 10µm	L3	2-7	60°C (Low pH) 40°C (High pH)
	Phenyl-Hexyl		13%	300	Yes	120Å	3, 3.5, 5, 10µm	L11	2-8	60°C (Low pH) 40°C (High pH)
MicroPulite® Platinum	PFP		10%	300	Yes	120Å	3, 3.5, 5, 10µm	L43	2-8	60°C (Low pH) 40°C (High pH)
	CN		5%	300	Yes	120Å	5µm	L10	2-8	45°C (Low pH) 45°C (High pH)
	C18	Special C18	16%	320	Yes	100Å	3, 3.5, 5, 10µm	L1	1-8	50°C (Low pH) 40°C (High pH)
	C8	Special C8	12%	320	Yes	100Å	3, 3.5, 5, 10µm	L7	1-8	40°C (Low pH) 40°C (High pH)

Column Series	Stationary Phase	Bonded Phase	Carbon Load	Surface area	End-capped	Pore Size	Particle Size	USP Classification	pH range	Temperature limit
MicroPulite® XP	tC18		18%	185	Yes	130Å	1.7,2.5,3, 3.5, 5, 7,10µm	L1	1-12	80°C (Low pH) 60°C (High pH)
	tC8		13%	185	Yes	130Å	1.7,2.5,3, 3.5, 5, 7,10µm	L7	1-12	60°C (Low pH) 60°C (High pH)
	tC4		9.5%	185	Yes	130Å	1.7,2.5,3, 3.5, 5, 7,10µm	L26	1-10	80°C (Low pH) 50°C (High pH)
	RP18		18%	185	Yes	130Å	1.7,2.5,3, 3.5, 5,10µm	L1	2-11	50°C (Low pH) 45°C (High pH)
	RP18 Plus		17%	185	Yes	130Å	1.7,2.5,3, 3.5, 5, 7,10µm	L1	2-11	50°C (Low pH) 45°C (High pH)
	NH ₂		9%	185	No	130Å	3.5, 5µm	L8	1-9	45°C (Low pH) 45°C (High pH)
	T3		14%	185	Yes	130Å	3.5, 5, 7, 10µm	L1	1-12	80°C (Low pH) 60°C (High pH)
	Phenyl-Hexyl		15%	185	Yes	130Å	1.7,2.5,3, 3.5, 5, 7, 10µm	L11	1-12	80°C (Low pH) 60°C (High pH)
	Amide		12%	185	No	130Å	1.7,2.5,3, 3.5, 5, 7, 10µm	L68	2-11	90°C (Low pH) 90°C (High pH)
	HILIC		-	185	No	130Å	1.7,2.5,3, 3.5, 5, 7, 10µm	L3	1-9	45°C (Low pH) 45°C (High pH)
	Oligo tC18		18%	185	Yes	130Å	1.7,2.5,3, 3.5, 5, 7, 10µm	L1	1-12	80°C (Low pH) 60°C (High pH)
	tPFP		7%	185	No	130Å	1.7,2.5,3, 3.5, 5, 7, 10µm	L43	1-8	45°C (Low pH) 45°C (High pH)
	tC18/PFP		14.5%	185	No	130Å	1.7,2.5,3, 3.5, 5, 7, 10µm	L1	1-12	45°C (Low pH) 45°C (High pH)
	tC18-AX		17%	185	Yes	130Å	1.7,2.5,3, 3.5, 5, 7, 10µm	L78	2-10	60°C (Low pH) 60°C (High pH)

Column Series	Stationary Phase	Bonded Phase	Carbon Load	Surface area	End-capped	Pore Size	Particle Size	USP Classification	pH range	Temperature limit
MicroPulite® PHSXP	tC18		17%	185	Yes	130Å	1.7,2.5,3, 3.5, 5, 7,10µm	L1	1-11	80°C (Low pH) 45°C (High pH)
	Phenyl-Hexyl		15%	185	Yes	130Å	1.7,2.5,3, 3.5, 5, 7,10µm	L11	1-11	80°C (Low pH) 45°C (High pH)
	tF5		10%	185	No	130Å	1.7,2.5,3, 3.5, 5, 7,10µm	L43	1-8	60°C (Low pH) 45°C (High pH)
MicroPulite® Perfect	T3		14%	300	Yes	120Å	3, 5, 10µm	L1	1-8	45°C (Low pH) 45°C (High pH)
	T3SB		14%	300	No	120Å	3, 5, 10µm	L1	1-8	45°C (Low pH) 45°C (High pH)
	Diol		15%	300	Yes	120Å	3, 5, 10µm	L20	1-8	60°C (Low pH) 60°C (High pH)
	HILIC		-	300	No	120Å	3, 5, 10µm	L3	1-5	45°C (Low pH) 45°C (High pH)
MicroPulite® HSS	T3		11%	230	Yes	100Å	1.8,2.5, 3.5µm	L1	1-8	45°C (Low pH) 45°C (High pH)
BioPulite®	XP Protein tC18		12%	100	Yes	300Å	1.7,2.5, 3.5,5µm	L1	1-12	80°C (Low pH) 60°C (High pH)
	XP Protein tC4		8%	100	Yes	300Å	1.7,2.5, 3.5,5µm	L26	1-12	80°C (Low pH) 50°C (High pH)
	XP Protein RP18		12%	100	Yes	300Å	3.5, 5µm	L1	2-11	50°C (Low pH) 45°C (High pH)
	XP Protein RP18 Plus		17%	100	Yes	300Å	3.5, 5µm	L1	2-11	50°C (Low pH) 45°C (High pH)
	Gold Protein C4		1.3%	100	Yes	300Å	3, 5µm	L26	2-8	60°C (Low pH) 40°C (High pH)
	Gold Protein C18		8.5%	100	Yes	300Å	3, 5µm	L1	2-8	60°C (Low pH) 40°C (High pH)
	Protein Perfect SEC			300 100	No No	125 Å 300 Å	5µm 5µm	L33 L33	2-8 2-8	45°C (Low pH) 45°C (High pH)

The red words means the column is compatible with 100% aqueous phase

MicroPulite® Gold Series: The good choice of cost-effective columns

MicroPulite® Gold series column use high purity silica particles and is produced under ISO9001 strict quality control system, all these make excellent peak shape , outstanding batch-to-batch stability and reproducibility. The Gold series provides C18 ,C8 ,NH₂ and other bonded phases, and is the good choice of cost-effective column for daily analysis and test.

- Sharp peak and high column efficiency
- General purpose column, with good reproducibility between columns and batches
- Stable in pH 2—8
- Generally applied in the field of pharmaceutical, environment and food safety

Stationary Phase	Bonded Phase	Carbon Load	Pore Size	Particle Size	USP Classification	pH range	Temperature limit
Gold C18		18%	120Å	3, 3.5, 5, 10µm	L1	2-8	60°C (Low pH) 40°C (High pH)
Gold C8		12%	120Å	3, 3.5, 5, 10µm	L7	2-8	60°C (Low pH) 40°C (High pH)
Gold C4		3.9%	120Å	3, 3.5, 5, 10µm	L26	2-8	60°C (Low pH) 40°C (High pH)
Gold RP18		20%	120Å	3, 3.5, 5, 10µm	L1	1-8	60°C (Low pH) 40°C (High pH)
Gold RP18 Plus		17%	120Å	3, 3.5, 5, 10µm	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 ₂		3.8%	120Å	3, 3.5, 5µm	L8	2-8	60°C (Low pH) 40°C (High pH)
Gold HILIC		-	120Å	3, 3.5, 5, 10µm	L3	2-7	60°C (Low pH) 40°C (High pH)
Gold Phenyl-Hexyl		13%	120Å	3, 3.5, 5, 10µm	L11	2-8	60°C (Low pH) 40°C (High pH)
Gold PFP		10%	120Å	3, 3.5, 5, 10µm	L43	2-8	60°C (Low pH) 40°C (High pH)
Gold CN		5%	120Å	5µm	L10	2-8	45°C (Low pH) 45°C (High pH)

MicroPulite® Gold C18 Column

As a general purpose C18 column, Gold C18 not only provides symmetrical peak shape, excellent separation and good batch stability, but also has a super cost-effective price, which can meet the daily analytical needs in different fields such as pharmaceutical, food, environment and chemical industry.

Stationary Phase	Bonded Phase	Carbon Load	Surface area	Endcapped	Pore Size	Particle Size	USP Classification	pH range	Temperature limit
C18		18%	300	Yes	120Å	3, 3.5, 5, 10µm	L1	2-8	60°C (Low pH) 40°C (High pH)

◆ Characteristic

- Octadecyl silane chemically bonded to porous silica particles
- General, Cost-effective C18 columns
- Good batch-to-batch stability and reproducibility
- Better peak shape for basic compounds, used in pharma, food, environment and other fields

◆ Application Cases

Determination of Related Substances of Prednisone Acetate

Methodology: Pharmacopoeia of the People's Republic of China 2020

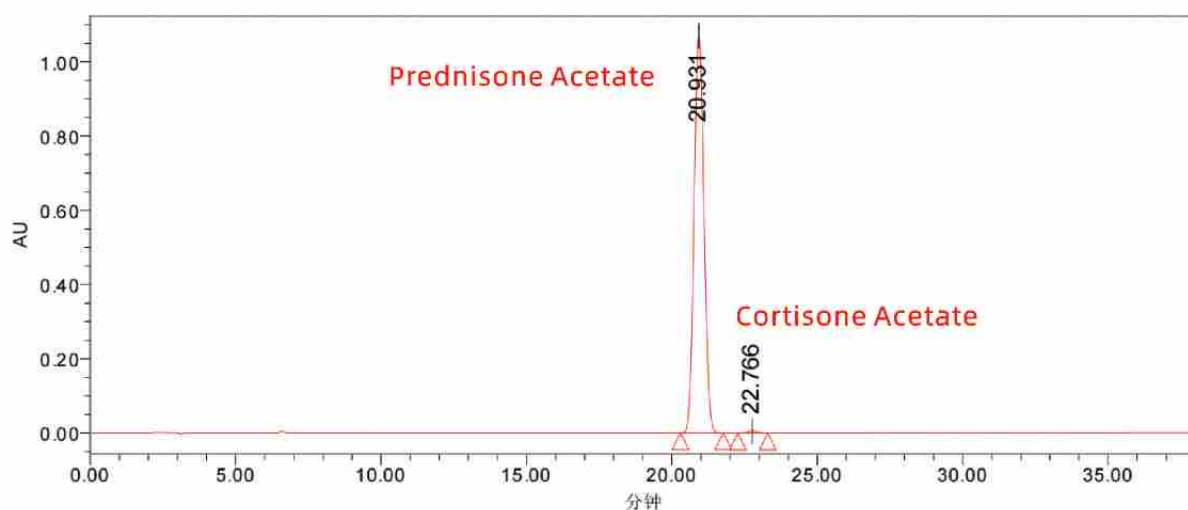
Column: MicroPulite® Gold C18 5µm 250*4.6mm

Wavelength: UV 240nm

Flow rate: 1.0mL/min

Column temperature: 35°C

Mobile phase: Acetonitrile-Water= (33: 67)



◆ Application Cases

Content Determination of Loquat Leaf (Oleanolic Acid, Ursolic Acid)

Methodology: Pharmacopoeia of the People's Republic of China 2020

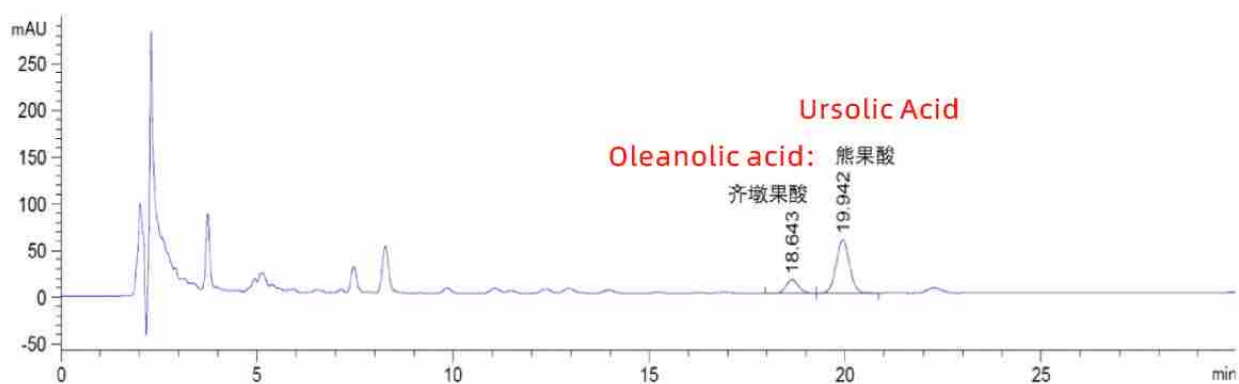
Column: MicroPulite® Gold C18 5µm 250*4.6mm

Wavelength: UV 210nm

Flow rate: 1.0mL/min

Column temperature: 30°C

Mobile phase: Acetonitrile-Methanol-0.5% Ammonium Acetate Solution= (67: 12: 21)



◆ Application Cases

Determination of Disodium EDTA Content

Methodology: 《GB 5009.278-2016》

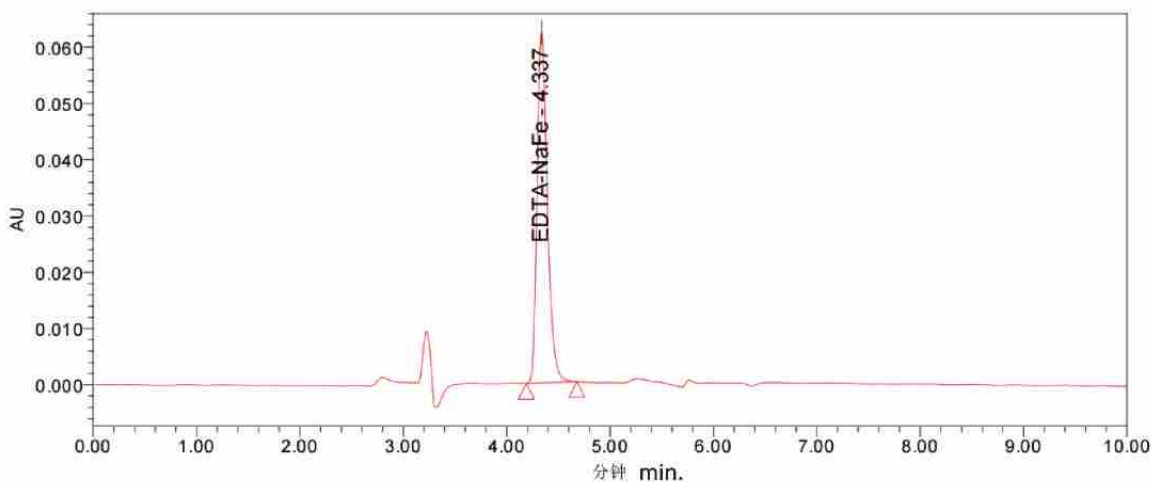
Column: MicroPulite® Gold C18 5μm 250*4.6mm

Wavelength: UV 254nm

Flow rate: 0.8mL/min

Column temperature: 35°C

Mobile phase: Methanol-[tetrabutylammonium bromide-sodium acetate mixed solution (pH4.0)]
= (15: 85)



28%Determination of Pymetrozine and Flonicamid Content

Methodology: Enterprise Standard

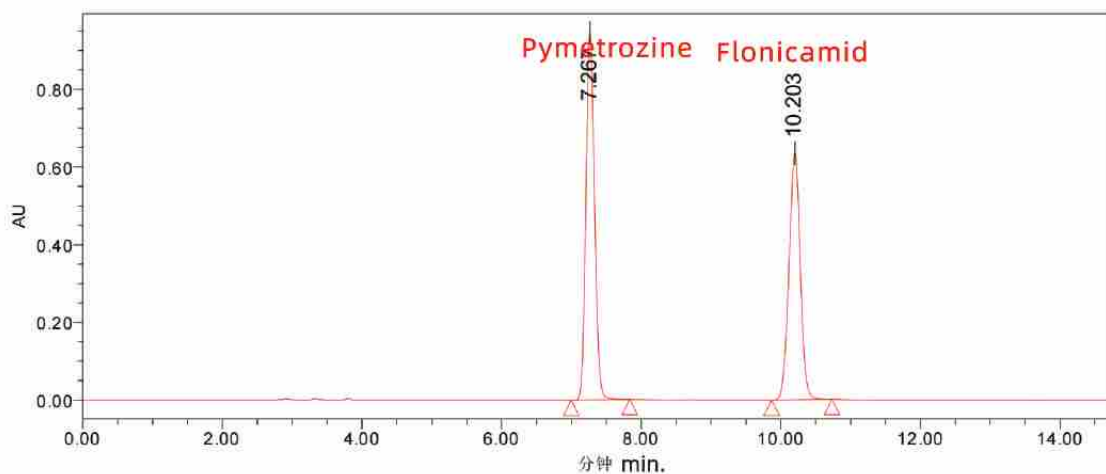
Column: MicroPulite® Gold C18 5μm 250*4.6mm

Wavelength: UV 260nm

Flow rate: 1.0mL/min

Column temperature: 30°C

Mobile phase: Acetonitrile-1.0g/L potassium dihydrogen phosphate solution= (10:90)



MicroPulite® Gold C18 Ordering Information

Particle Size:3 µm	
Size	Part No
30x2.1mm	GDC18-032130
50x2.1mm	GDC18-052130
100x2.1mm	GDC18-102130
150x2.1mm	GDC18-152130
30x3.0mm	GDC18-033030
50x3.0mm	GDC18-053030
100x3.0mm	GDC18-103030
150x3.0mm	GDC18-153030
250x3.0mm	GDC18-253030
30x4.6mm	GDC18-034630
50x4.6mm	GDC18-054630
100x4.6mm	GDC18-104630
150x4.6mm	GDC18-154630
200x4.6mm	GDC18-204630
250x4.6mm	GDC18-254630

Particle Size:3.5 µm	
Size	Part No
30x2.1mm	GDC18-032135
50x2.1mm	GDC18-052135
100x2.1mm	GDC18-102135
150x2.1mm	GDC18-152135
30x3.0mm	GDC18-033035
50x3.0mm	GDC18-053035
100x3.0mm	GDC18-103035
150x3.0mm	GDC18-153035
250x3.0mm	GDC18-253035
30x4.6mm	GDC18-034635
50x4.6mm	GDC18-054635
100x4.6mm	GDC18-104635
150x4.6mm	GDC18-154635
200x4.6mm	GDC18-204635
250x4.6mm	GDC18-254635

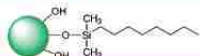
Particle Size:5 µm	
Size	Part No
30x2.1mm	GDC18-032150
50x2.1mm	GDC18-052150
100x2.1mm	GDC18-102150
150x2.1mm	GDC18-152150
30x3.0mm	GDC18-033050
50x3.0mm	GDC18-053050
100x3.0mm	GDC18-103050
150x3.0mm	GDC18-153050
250x3.0mm	GDC18-253050
30x4.6mm	GDC18-034650
50x4.6mm	GDC18-054650
100x4.6mm	GDC18-104650
150x4.6mm	GDC18-154650
200x4.6mm	GDC18-204650
250x4.6mm	GDC18-254650

Particle Size:5 µm	
Size	Part No
150x10mm	GDC18-1510050
250x10mm	GDC18-2510050
150x20mm	GDC18-1520050
250x20mm	GDC18-2520050
150x21.2mm	GDC18-1521250
250x21.2mm	GDC18-2521250
150x30mm	GDC18-1530050
250x30mm	GDC18-2530050
150x50mm	GDC18-1550050
250x50mm	GDC18-2550050

Particle Size:10 µm	
Size	Part No
150x10mm	GDC18-15100100
250x10mm	GDC18-25100100
150x20mm	GDC18-15200100
250x20mm	GDC18-25200100
150x21.2mm	GDC18-15212100
250x21.2mm	GDC18-25212100
150x30mm	GDC18-15300100
250x30mm	GDC18-25300100
150x50mm	GDC18-15500100
250x50mm	GDC18-25500100

MicroPulite® Gold C8 Column

Gold C8 has a weak retention capacity compared to C18, and stronger hydrophobic compounds retention time will be shortened, resulting in higher analytical efficiency than C18 columns, and can provide a different selectivity from C18.

Stationary Phase	Bonded Phase	Carbon Load	Surface area	Endcapped	Pore Size	Particle Size	USP Classification	pH range	Temperature limit
C8		12%	300	Yes	120Å	3, 3.5, 5, 10µm	L7	2-8	60°C (Low pH) 40°C (High pH)

◆ Characteristic

- Octylsilane chemically bonded to totally porous silica particles
- General, Cost-effective C8 column
- Less retentive than C18, suitable for the analysis of compounds with larger molecular weight
- Better peak shapes for basic compounds, mainly used in the pharmaceuticals industry

◆ Application Cases

Determination of Related Substances of Mycophenolate Mofetil

Method: Pharmacopoeia of the People's Republic of China 2020

Column: MicroPulite® Gold C8 4.6*250mm 5µm

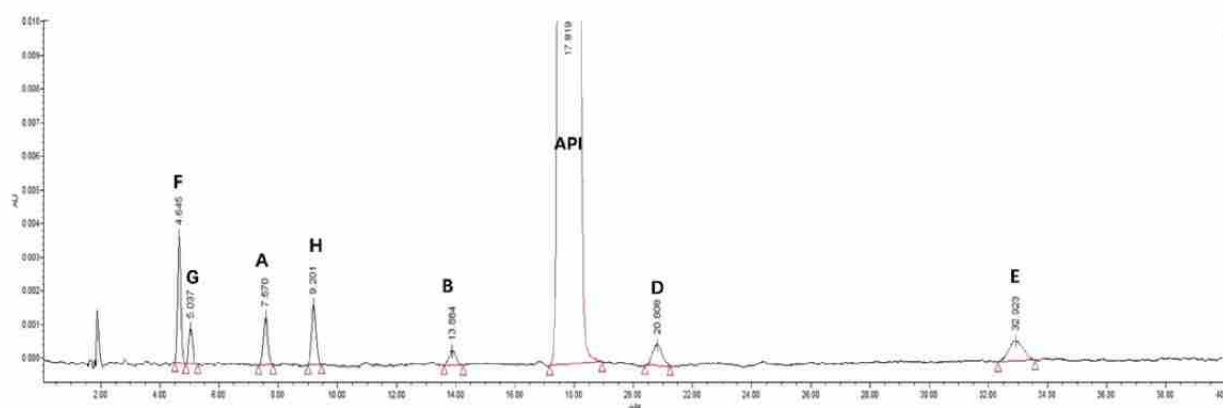
Wavelength: UV 250nm

Flow rate: 1.5mL/min

Column temperature: 45°C

Mobile phase: Phosphate buffer (2mL triethylamine, add 650mL of water, adjust the pH to 5.3 with dilute phosphoric acid)-acetonitrile (65:35)

Chromatogram:



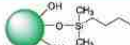
MicroPulite® Gold C8 Ordering Information

Particle Size: 3 µm		Particle Size: 3.5 µm		Particle Size: 5 µm	
Size	Part No	Size	Part No	Size	Part No
30x2.1mm	GDC08-032130	30x2.1mm	GDC08-032135	30x2.1mm	GDC08-032150
50x2.1mm	GDC08-052130	50x2.1mm	GDC08-052135	50x2.1mm	GDC08-052150
100x2.1mm	GDC08-102130	100x2.1mm	GDC08-102135	100x2.1mm	GDC08-102150
150x2.1mm	GDC08-152130	150x2.1mm	GDC08-152135	150x2.1mm	GDC08-152150
30x3.0mm	GDC08-033030	30x3.0mm	GDC08-033035	30x3.0mm	GDC08-033050
50x3.0mm	GDC08-053030	50x3.0mm	GDC08-053035	50x3.0mm	GDC08-053050
100x3.0mm	GDC08-103030	100x3.0mm	GDC08-103035	100x3.0mm	GDC08-103050
150x3.0mm	GDC08-153030	150x3.0mm	GDC08-153035	150x3.0mm	GDC08-153050
250x3.0mm	GDC08-253030	250x3.0mm	GDC08-253035	250x3.0mm	GDC08-253050
30x4.6mm	GDC08-034630	30x4.6mm	GDC08-034635	30x4.6mm	GDC08-034650
50x4.6mm	GDC08-054630	50x4.6mm	GDC08-054635	50x4.6mm	GDC08-054650
100x4.6mm	GDC08-104630	100x4.6mm	GDC08-104635	100x4.6mm	GDC08-104650
150x4.6mm	GDC08-154630	150x4.6mm	GDC08-154635	150x4.6mm	GDC08-154650
200x4.6mm	GDC08-204630	200x4.6mm	GDC08-204635	200x4.6mm	GDC08-204650
250x4.6mm	GDC08-254630	250x4.6mm	GDC08-254635	250x4.6mm	GDC08-254650

Particle Size: 5 µm		Particle Size: 10µm	
Size	Part No	Size	Part No
150x10mm	GDC08-1510050	150x10mm	GDC08-15100100
250x10mm	GDC08-2510050	250x10mm	GDC08-25100100
150x20mm	GDC08-1520050	150x20mm	GDC08-15200100
250x20mm	GDC08-2520050	250x20mm	GDC08-25200100
150x21.2mm	GDC08-1521250	150x21.2mm	GDC08-15212100
250x21.2mm	GDC08-2521250	250x21.2mm	GDC08-25212100
150x30mm	GDC08-1530050	150x30mm	GDC08-15300100
250x30mm	GDC08-2530050	250x30mm	GDC08-25300100
150x50mm	GDC08-1550050	150x50mm	GDC08-15500100
250x50mm	GDC08-2550050	250x50mm	GDC08-25500100

MicroPulite® Gold C4 Column

Gold C4 has a shorter carbon chain, less retentive than C18 and C8, different selectivity for larger molecular compound, Suitable for analyzing compounds with larger molecular weight in small molecules, proteins and other macromolecular compounds.

Stationary Phase	Bonded Phase	Carbon Load	Surface area	Endcapped	Pore Size	Particle Size	USP Classification	pH range	Temperature limit
C4		3.9%	300	Yes	120Å	3,3.5 5,10µm	L26	2-8	60°C (Low pH) 40°C (High pH)

MicroPulite® Gold C4 Ordering Information

Particle Size: 3 µm		Particle Size: 3.5 µm		Particle Size: 5 µm	
Size	Part No	Size	Part No	Size	Part No
30x2.1mm	GDC04-032130	30x2.1mm	GDC04-032135	30x2.1mm	GDC04-032150
50x2.1mm	GDC04-052130	50x2.1mm	GDC04-052135	50x2.1mm	GDC04-052150
100x2.1mm	GDC04-102130	100x2.1mm	GDC04-102135	100x2.1mm	GDC04-102150
150x2.1mm	GDC04-152130	150x2.1mm	GDC04-152135	150x2.1mm	GDC04-152150
30x3.0mm	GDC04-033030	30x3.0mm	GDC04-033035	30x3.0mm	GDC04-033050
50x3.0mm	GDC04-053030	50x3.0mm	GDC04-053035	50x3.0mm	GDC04-053050
100x3.0mm	GDC04-103030	100x3.0mm	GDC04-103035	100x3.0mm	GDC04-103050
150x3.0mm	GDC04-153030	150x3.0mm	GDC04-153035	150x3.0mm	GDC04-153050
250x3.0mm	GDC04-253030	250x3.0mm	GDC04-253035	250x3.0mm	GDC04-253050
30x4.6mm	GDC04-034630	30x4.6mm	GDC04-034635	30x4.6mm	GDC04-034650
50x4.6mm	GDC04-054630	50x4.6mm	GDC04-054635	50x4.6mm	GDC04-054650
100x4.6mm	GDC04-104630	100x4.6mm	GDC04-104635	100x4.6mm	GDC04-104650
150x4.6mm	GDC04-154630	150x4.6mm	GDC04-154635	150x4.6mm	GDC04-154650
200x4.6mm	GDC04-204630	200x4.6mm	GDC04-204635	200x4.6mm	GDC04-204650
250x4.6mm	GDC04-254630	250x4.6mm	GDC04-254635	250x4.6mm	GDC04-254650

Particle Size: 5 µm		Particle Size: 10 µm	
Size	Part No	Size	Part No
150x10mm	GDC04-1510050	150x10mm	GDC04-15100100
250x10mm	GDC04-2510050	250x10mm	GDC04-25100100
150x20mm	GDC04-1520050	150x20mm	GDC04-15200100
250x20mm	GDC04-2520050	250x20mm	GDC04-25200100
150x21.2mm	GDC04-1521250	150x21.2mm	GDC04-15212100
250x21.2mm	GDC04-2521250	250x21.2mm	GDC04-25212100
150x30mm	GDC04-1530050	150x30mm	GDC04-15300100
250x30mm	GDC04-2530050	250x30mm	GDC04-25300100

MicroPulite® Gold RP18 Column

Gold RP18 has a polar embedded groups and patented triple- bonded technology, is compatible with 100% aqueous mobile phase, and the ability to resist bond and phase loss is improved under high aqueous conditions.

Stationary Phase	Bonded Phase	Carbon Load	Surface area	Endcapped	Pore Size	Particle Size	USP Classification	pH range	Temperature limit
RP18		20%	300	Yes	120Å	3,3.5, 5, 10µm	L1	1-8	60°C (Low pH) 40°C (High pH)

MicroPulite® Gold RP18 Ordering Information

Particle Size: 3 µm		Particle Size: 3.5 µm		Particle Size: 5 µm	
Size	Part No	Size	Part No	Size	Part No
30x2.1mm	GDR18-032130	30x2.1mm	GDR18-032135	30x2.1mm	GDR18-032150
50x2.1mm	GDR18-052130	50x2.1mm	GDR18-052135	50x2.1mm	GDR18-052150
100x2.1mm	GDR18-102130	100x2.1mm	GDR18-102135	100x2.1mm	GDR18-102150
150x2.1mm	GDR18-152130	150x2.1mm	GDR18-152135	150x2.1mm	GDR18-152150
30x3.0mm	GDR18-033030	30x3.0mm	GDR18-033035	30x3.0mm	GDR18-033050
50x3.0mm	GDR18-053030	50x3.0mm	GDR18-053035	50x3.0mm	GDR18-053050
100x3.0mm	GDR18-103030	100x3.0mm	GDR18-103035	100x3.0mm	GDR18-103050
150x3.0mm	GDR18-153030	150x3.0mm	GDR18-153035	150x3.0mm	GDR18-153050
250x3.0mm	GDR18-253030	250x3.0mm	GDR18-253035	250x3.0mm	GDR18-253050
30x4.6mm	GDR18-034630	30x4.6mm	GDR18-034635	30x4.6mm	GDR18-034650
50x4.6mm	GDR18-054630	50x4.6mm	GDR18-054635	50x4.6mm	GDR18-054650
100x4.6mm	GDR18-104630	100x4.6mm	GDR18-104635	100x4.6mm	GDR18-104650
150x4.6mm	GDR18-154630	150x4.6mm	GDR18-154635	150x4.6mm	GDR18-154650
200x4.6mm	GDR18-204630	200x4.6mm	GDR18-204635	200x4.6mm	GDR18-204650
250x4.6mm	GDR18-254630	250x4.6mm	GDR18-254635	250x4.6mm	GDR18-254650

Particle Size: 5 µm		Particle Size: 10 µm	
Size	Part No	Size	Part No
150x10mm	GDR18-1510050	150x10mm	GDR18-15100100
250x10mm	GDR18-2510050	250x10mm	GDR18-25100100
150x20mm	GDR18-1520050	150x20mm	GDR18-15200100
250x20mm	GDR18-2520050	250x20mm	GDR18-25200100
150x21.2mm	GDR18-1521250	150x21.2mm	GDR18-15212100
250x21.2mm	GDR18-2521250	250x21.2mm	GDR18-25212100
150x30mm	GDR18-1530050	150x30mm	GDR18-15300100
250x30mm	GDR18-2530050	250x30mm	GDR18-25300100

MicroPulite® Gold RP18 Plus Column

In order to increase the retention of compounds, C18 Columns often need to be used in high aqueous phases or even 100% aqueous phase, and use in high aqueous phase for a long time easily lead to hydrophobic collapse. Gold RP18 Plus can effectively use the hydrophilic effect of polar groups by embedding a polar group within the octadecyl chain, making it compatible with and resistant to 100% aqueous phase, and at the same time shielding the residual silanol group effect on the surface of the silica. Gold RP18 Plus can reduce tailing of basic compounds, and provides selectivity different from that of C18.

Stationary Phase	Bonded Phase	Carbon Load	Surface area	Endcapped	Pore Size	Particle Size	USP Classification	pH range	Temperature limit
RP18 Plus		17%	300	Yes	120Å	3,3.5 5,10µm	L1	2-8	60°C (Low pH) 40°C (High pH)

◆Application Cases

Determination of the content of Lamiphlois

Method: Pharmacopoeia of the People's Republic of China 2020

Column: MicroPulite® Gold RP18 Plus 4.6*250mm 5µm(Part No: GDR18P-254650)

Wavelength: UV 235nm

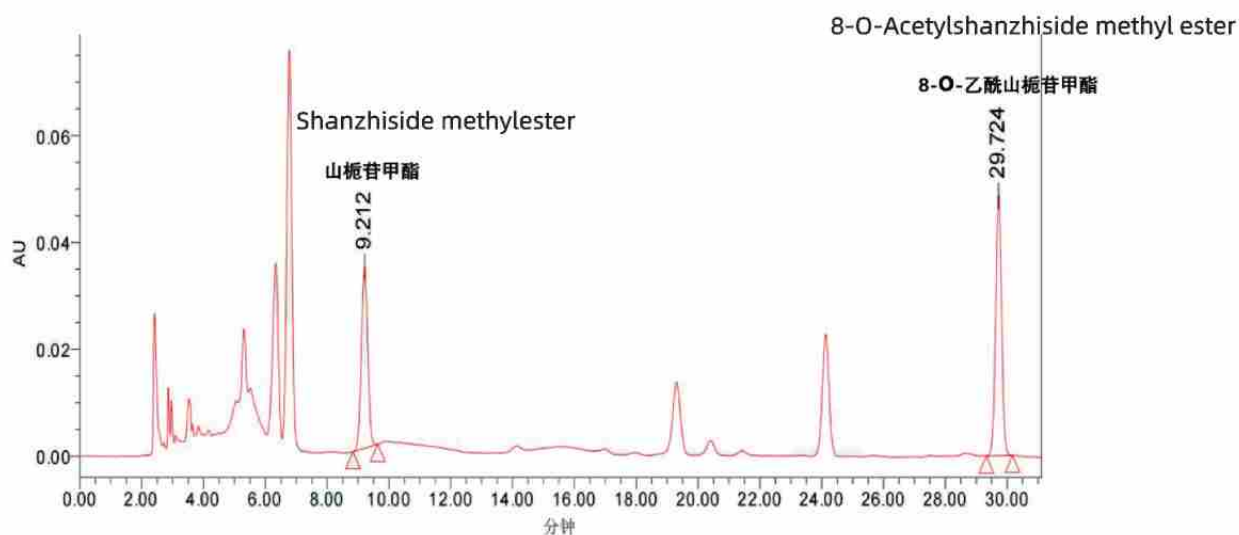
Flow rate: 1.0mL/min

Column temperature: 30°C

Mobile phase: Phase A: acetonitrile; Phase B: water

Time	A%	B%
0	9	91
11	9	91
35	18	82
45	18	82

Chromatogram:



◆ Application Cases

Determination of 2-Pyrrolidone in PVP K30

Methodology: Pharmacopoeia of the People's Republic of China 2020

Column: MicroPulite® Gold RP18 Plus 5µm 250*4.6mm

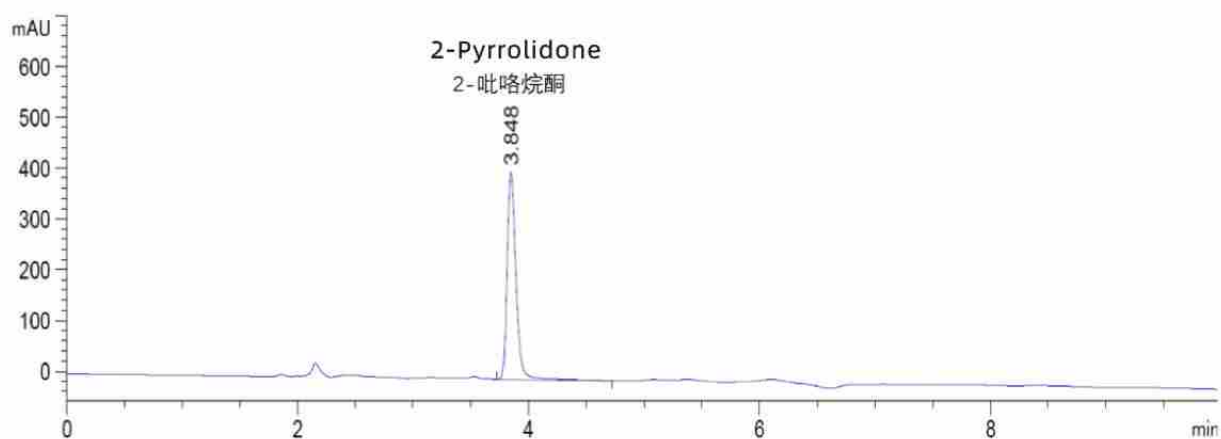
Wavelength: UV 205nm

Flow rate: 1.0mL/min

Column temperature: 30°C

Mobile phase: Acetonitrile-methanol-water= (5: 5: 90)

Chromatogram:



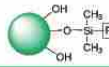
MicroPulite® Gold RP18 Plus Ordering Information

Particle Size: 3 µm		Particle Size: 3.5 µm		Particle Size: 5 µm	
Size	Part No	Size	Part No	Size	Part No
30x2.1mm	GDR18P-032130	30x2.1mm	GDR18P-032135	30x2.1mm	GDR18P-032150
50x2.1mm	GDR18P-052130	50x2.1mm	GDR18P-052135	50x2.1mm	GDR18P-052150
100x2.1mm	GDR18P-102130	100x2.1mm	GDR18P-102135	100x2.1mm	GDR18P-102150
150x2.1mm	GDR18P-152130	150x2.1mm	GDR18P-152135	150x2.1mm	GDR18P-152150
30x3.0mm	GDR18P-033030	30x3.0mm	GDR18P-033035	30x3.0mm	GDR18P-033050
50x3.0mm	GDR18P-053030	50x3.0mm	GDR18P-053035	50x3.0mm	GDR18P-053050
100x3.0mm	GDR18P-103030	100x3.0mm	GDR18P-103035	100x3.0mm	GDR18P-103050
150x3.0mm	GDR18P-153030	150x3.0mm	GDR18P-153035	150x3.0mm	GDR18P-153050
250x3.0mm	GDR18P-253030	250x3.0mm	GDR18P-253035	250x3.0mm	GDR18P-253050
30x4.6mm	GDR18P-034630	30x4.6mm	GDR18P-034635	30x4.6mm	GDR18P-034650
50x4.6mm	GDR18P-054630	50x4.6mm	GDR18P-054635	50x4.6mm	GDR18P-054650
100x4.6mm	GDR18P-104630	100x4.6mm	GDR18P-104635	100x4.6mm	GDR18P-104650
150x4.6mm	GDR18P-154630	150x4.6mm	GDR18P-154635	150x4.6mm	GDR18P-154650
200x4.6mm	GDR18P-204630	200x4.6mm	GDR18P-204635	200x4.6mm	GDR18P-204650
250x4.6mm	GDR18P-254630	250x4.6mm	GDR18P-254635	250x4.6mm	GDR18P-254650

Particle Size: 5 µm		Particle Size: 10 µm	
Size	Part No	Size	Part No
150x10mm	GDR18P-1510050	150x10mm	GDR18P-15100100
250x10mm	GDR18P-2510050	250x10mm	GDR18P-25100100
150x20mm	GDR18P-1520050	150x20mm	GDR18P-15200100
250x20mm	GDR18P-2520050	250x20mm	GDR18P-25200100
150x21.2mm	GDR18P-1521250	150x21.2mm	GDR18P-15212100
250x21.2mm	GDR18P-2521250	250x21.2mm	GDR18P-25212100
150x30mm	GDR18P-1530050	150x30mm	GDR18P-15300100
250x30mm	GDR18P-2530050	250x30mm	GDR18P-25300100

MicroPulite® Gold RP8 Plus Column

Compared to Gold C8 columns, Gold RP8 Plus is compatible and tolerant of 100% water and offers different selectivity from Gold C8.

Stationary Phase	Bonded Phase	Carbon Load	Surface area	Endcapped	Pore Size	Particle Size	USP Classification	pH range	Temperature limit
RP8 Plus		15%	300	Yes	120Å	3, 3.5, 5µm	L7	2-8	60°C (Low pH) 40°C (High pH)

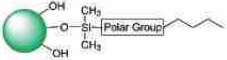
MicroPulite® Gold RP8 Plus Ordering Information

Particle Size: 3 µm		Particle Size: 3.5 µm		Particle Size: 5 µm	
Size	Part No	Size	Part No	Size	Part No
30x2.1mm	GDR08P-032130	30x2.1mm	GDR08P-032135	30x2.1mm	GDR08P-032150
50x2.1mm	GDR08P-052130	50x2.1mm	GDR08P-052135	50x2.1mm	GDR08P-052150
100x2.1mm	GDR08P-102130	100x2.1mm	GDR08P-102135	100x2.1mm	GDR08P-102150
150x2.1mm	GDR08P-152130	150x2.1mm	GDR08P-152135	150x2.1mm	GDR08P-152150
30x3.0mm	GDR08P-033030	30x3.0mm	GDR08P-033035	30x3.0mm	GDR08P-033050
50x3.0mm	GDR08P-053030	50x3.0mm	GDR08P-053035	50x3.0mm	GDR08P-053050
100x3.0mm	GDR08P-103030	100x3.0mm	GDR08P-103035	100x3.0mm	GDR08P-103050
150x3.0mm	GDR08P-153030	150x3.0mm	GDR08P-153035	150x3.0mm	GDR08P-153050
250x3.0mm	GDR08P-253030	250x3.0mm	GDR08P-253035	250x3.0mm	GDR08P-253050
30x4.6mm	GDR08P-034630	30x4.6mm	GDR08P-034635	30x4.6mm	GDR08P-034650
50x4.6mm	GDR08P-054630	50x4.6mm	GDR08P-054635	50x4.6mm	GDR08P-054650
100x4.6mm	GDR08P-104630	100x4.6mm	GDR08P-104635	100x4.6mm	GDR08P-104650
150x4.6mm	GDR08P-154630	150x4.6mm	GDR08P-154635	150x4.6mm	GDR08P-154650
200x4.6mm	GDR08P-204630	200x4.6mm	GDR08P-204635	200x4.6mm	GDR08P-204650
250x4.6mm	GDR08P-254630	250x4.6mm	GDR08P-254635	250x4.6mm	GDR08P-254650

Particle Size: 5 µm	
Size	Part No
150x10mm	GDR08P-1510050
250x10mm	GDR08P-2510050
150x20mm	GDR08P-1520050
250x20mm	GDR08P-2520050
150x21.2mm	GDR08P-1521250
250x21.2mm	GDR08P-2521250
150x30mm	GDR08P-1530050
250x30mm	GDR08P-2530050

MicroPulite® Gold RP4 Plus Column

For reverse phase analysis of large polar proteins, the Gold RP4 plus provides the ability to analyze under 100% water conditions, greatly enhance retention in reverse phase.

Stationary Phase	Bonded Phase	Carbon Load	Surface area	Endcapped	Pore Size	Particle Size	USP Classification	pH range	Temperature limit
RP4 Plus		3.9%	300	Yes	120Å	3, 3.5, 5µm	L26	2-8	60°C (Low pH) 40°C (High pH)

MicroPulite® Gold RP4 Plus Ordering Information

Particle Size: 3 µm		Particle Size: 3.5 µm		Particle Size: 5 µm	
Size	Part No	Size	Part No	Size	Part No
30x2.1mm	GDR04P-032130	30x2.1mm	GDR04P-032135	30x2.1mm	GDR04P-032150
50x2.1mm	GDR04P-052130	50x2.1mm	GDR04P-052135	50x2.1mm	GDR04P-052150
100x2.1mm	GDR04P-102130	100x2.1mm	GDR04P-102135	100x2.1mm	GDR04P-102150
150x2.1mm	GDR04P-152130	150x2.1mm	GDR04P-152135	150x2.1mm	GDR04P-152150
30x3.0mm	GDR04P-033030	30x3.0mm	GDR04P-033035	30x3.0mm	GDR04P-033050
50x3.0mm	GDR04P-053030	50x3.0mm	GDR04P-053035	50x3.0mm	GDR04P-053050
100x3.0mm	GDR04P-103030	100x3.0mm	GDR04P-103035	100x3.0mm	GDR04P-103050
150x3.0mm	GDR04P-153030	150x3.0mm	GDR04P-153035	150x3.0mm	GDR04P-153050
250x3.0mm	GDR04P-253030	250x3.0mm	GDR04P-253035	250x3.0mm	GDR04P-253050
30x4.6mm	GDR04P-034630	30x4.6mm	GDR04P-034635	30x4.6mm	GDR04P-034650
50x4.6mm	GDR04P-054630	50x4.6mm	GDR04P-054635	50x4.6mm	GDR04P-054650
100x4.6mm	GDR04P-104630	100x4.6mm	GDR04P-104635	100x4.6mm	GDR04P-104650
150x4.6mm	GDR04P-154630	150x4.6mm	GDR04P-154635	150x4.6mm	GDR04P-154650
200x4.6mm	GDR04P-204630	200x4.6mm	GDR04P-204635	200x4.6mm	GDR04P-204650
250x4.6mm	GDR04P-254630	250x4.6mm	GDR04P-254635	250x4.6mm	GDR04P-254650

Particle Size: 5 µm	
Size	Part No
150x10mm	GDR04P-1510050
250x10mm	GDR04P-2510050
150x20mm	GDR04P-1520050
250x20mm	GDR04P-2520050
150x21.2mm	GDR04P-1521250
250x21.2mm	GDR04P-2521250
150x30mm	GDR04P-1530050
250x30mm	GDR04P-2530050

MicroPulite® Gold NH₂ Column

Aminopropyl-bonded silica columns can be used in both reverse phase and normal phase, and the triple bonded technology reduces the loss of the bonded phase. Gold NH₂ columns are subject to weak anion exchange, hydrophilic interaction, and other multiple effects, and are suitable for use in the analysis of compounds containing -COOH\CO\NH₂\NHR₂\NR₂.

Stationary Phase	Bonded Phase	Carbon Load	Surface area	Endcapped	Pore Size	Particle Size	USP Classification	pH range	Temperature limit
NH ₂		3.8%	300	No	120Å	3,3.5 5 μm	L8	2-8	60°C (Low pH) 40°C (High pH)

◆Application Cases

Determination of Betaine in Goji Berries

Methodology: Pharmacopoeia of the People's Republic of China 2020

Column: MicroPulite® Gold NH₂ 5μm 250*4.6mm

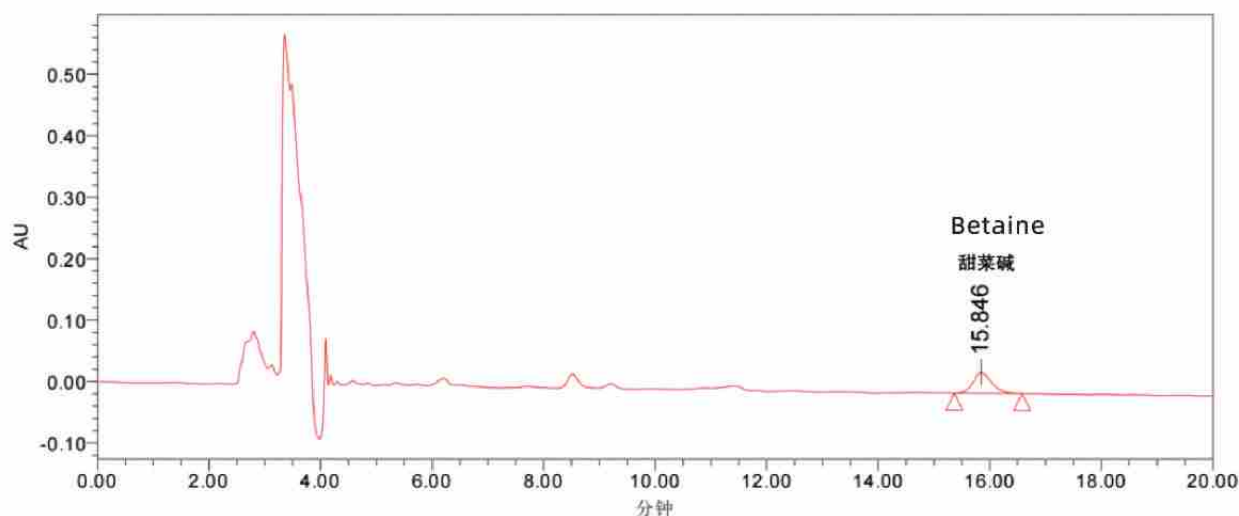
Wavelength: UV 195nm

Flow rate: 1.0mL/min

Column temperature: 30°C

Mobile phase: Acetonitrile-Water = (85: 15)

Chromatogram:



MicroPulite® Gold NH₂ Ordering Information

Particle Size: 3µm	
Size	Part No
30x2.1mm	GDNH-032130
50x2.1mm	GDNH-052130
100x2.1mm	GDNH-102130
150x2.1mm	GDNH-152130
30x3.0mm	GDNH-033030
50x3.0mm	GDNH-053030
100x3.0mm	GDNH-103030
150x3.0mm	GDNH-153030
250x3.0mm	GDNH-253030
30x4.6mm	GDNH-034630
50x4.6mm	GDNH-054630
100x4.6mm	GDNH-104630
150x4.6mm	GDNH-154630
200x4.6mm	GDNH-204630
250x4.6mm	GDNH-254630

Particle Size: 3.5 µm	
Size	Part No
30x2.1mm	GDNH-032135
50x2.1mm	GDNH-052135
100x2.1mm	GDNH-102135
150x2.1mm	GDNH-152135
30x3.0mm	GDNH-033035
50x3.0mm	GDNH-053035
100x3.0mm	GDNH-103035
150x3.0mm	GDNH-153035
250x3.0mm	GDNH-253035
30x4.6mm	GDNH-034635
50x4.6mm	GDNH-054635
100x4.6mm	GDNH-104635
150x4.6mm	GDNH-154635
200x4.6mm	GDNH-204635
250x4.6mm	GDNH-254635

Particle Size: 5 µm	
Size	Part No
30x2.1mm	GDNH-032150
50x2.1mm	GDNH-052150
100x2.1mm	GDNH-102150
150x2.1mm	GDNH-152150
30x3.0mm	GDNH-033050
50x3.0mm	GDNH-053050
100x3.0mm	GDNH-103050
150x3.0mm	GDNH-153050
250x3.0mm	GDNH-253050
30x4.6mm	GDNH-034650
50x4.6mm	GDNH-054650
100x4.6mm	GDNH-104650
150x4.6mm	GDNH-154650
200x4.6mm	GDNH-204650
250x4.6mm	GDNH-254650

Particle Size: 5 µm	
Size	Part No
150x10mm	GDNH-1510050
250x10mm	GDNH-2510050
150x20mm	GDNH-1520050
250x20mm	GDNH-2520050
150x21.2mm	GDNH-1521250
250x21.2mm	GDNH-2521250
150x30mm	GDNH-1530050
250x30mm	GDNH-2530050

MicroPulite® Gold HILIC Column

Gold HILIC is an unbonded silica , can be used in hydrophilic mode for the retention of large polar compounds that cannot be retained in the reverse phase. Gold HILIC can also be used as a silica column under normal phase conditions.

Stationary Phase	Bonded Phase	Carbon Load	Surface area	Endcapped	Pore Size	Particle Size	USP Classification	pH range	Temperature limit
HILIC		-	300	No	120Å	3,3.5 5,10µm	L3	2-7	60°C (Low pH) 40°C (High pH)

◆Application Cases

Analysis of Five Phospholipids in Soy Lecithin

Column: MicroPulite® Gold HILIC 5µm 250*4.6mm

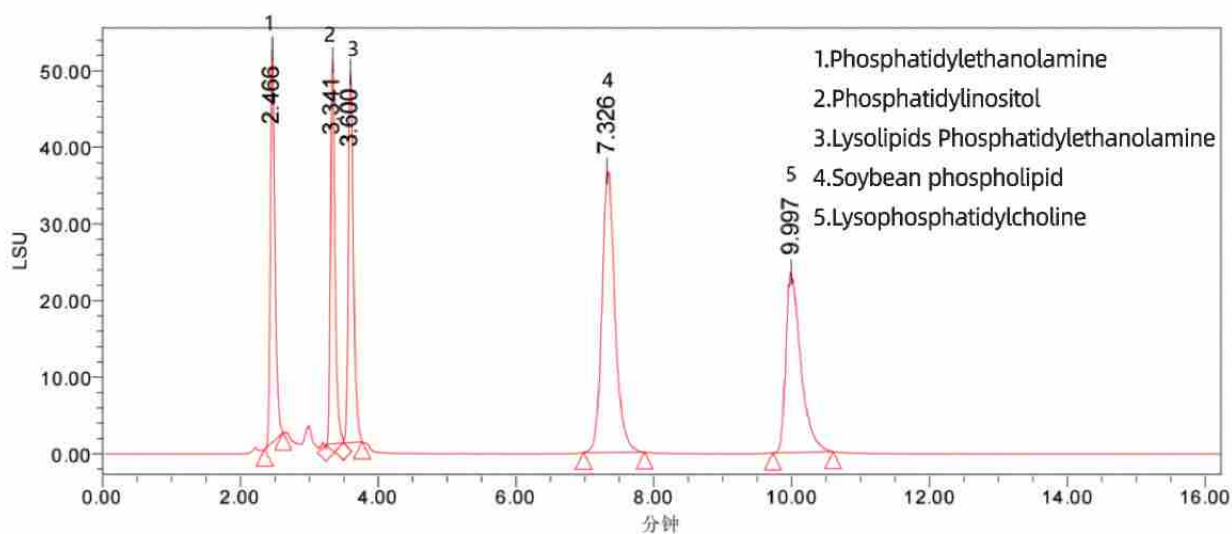
Detector: Evaporative light scattering detector

Flow rate: 1.0mL/min

Column temperature: 40°C

Mobile phase: Methanol-50 mM Ammonium Acetate = (95: 5)

Chromatogram:



MicroPulite® Gold HILIC Ordering Information

Particle Size: 3 µm	
Size	Part No
30x2.1mm	GDH-032130
50x2.1mm	GDH-052130
100x2.1mm	GDH-102130
150x2.1mm	GDH-152130
30x3.0mm	GDH-033030
50x3.0mm	GDH-053030
100x3.0mm	GDH-103030
150x3.0mm	GDH-153030
250x3.0mm	GDH-253030
30x4.6mm	GDH-034630
50x4.6mm	GDH-054630
100x4.6mm	GDH-104630
150x4.6mm	GDH-154630
200x4.6mm	GDH-204630
250x4.6mm	GDH-254630

Particle Size: 3.5 µm	
Size	Part No
30x2.1mm	GDH-032135
50x2.1mm	GDH-052135
100x2.1mm	GDH-102135
150x2.1mm	GDH-152135
30x3.0mm	GDH-033035
50x3.0mm	GDH-053035
100x3.0mm	GDH-103035
150x3.0mm	GDH-153035
250x3.0mm	GDH-253035
30x4.6mm	GDH-034635
50x4.6mm	GDH-054635
100x4.6mm	GDH-104635
150x4.6mm	GDH-154635
200x4.6mm	GDH-204635
250x4.6mm	GDH-254635

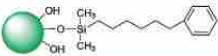
Particle Size: 5 µm	
Size	Part No
30x2.1mm	GDH-032150
50x2.1mm	GDH-052150
100x2.1mm	GDH-102150
150x2.1mm	GDH-152150
30x3.0mm	GDH-033050
50x3.0mm	GDH-053050
100x3.0mm	GDH-103050
150x3.0mm	GDH-153050
250x3.0mm	GDH-253050
30x4.6mm	GDH-034650
50x4.6mm	GDH-054650
100x4.6mm	GDH-104650
150x4.6mm	GDH-154650
200x4.6mm	GDH-204650
250x4.6mm	GDH-254650

Particle Size: 5 µm	
Size	Part No
150x10mm	GDH-1510050
250x10mm	GDH-2510050
150x20mm	GDH-1520050
250x20mm	GDH-2520050
150x21.2mm	GDH-1521250
250x21.2mm	GDH-2521250
150x30mm	GDH-1530050
250x30mm	GDH-2530050

Particle Size: 10 µm	
Size	Part No
150x10mm	GDH-15100100
250x10mm	GDH-25100100
150x20mm	GDH-15200100
250x20mm	GDH-25200100
150x21.2mm	GDH-15212100
250x21.2mm	GDH-25212100
150x30mm	GDH-15300100
250x30mm	GDH-25300100

MicroPulite® Gold Phenyl-Hexyl Column

Gold Phenyl-Hexyl has a hexyl connect the benzene ring, reduces hydrolysis of the bonded phase and improves chemical stability compared to phenyl-propyl. Gold Phenyl-Hexyl provides complementary selectivity to straight-chain alkane columns, such as C18 or C8, and is suitable for analyzing aromatic compounds, amines, and polar compounds.

Stationary Phase	Bonded Phase	Carbon Load	Surface area	Endcapped	Pore Size	Particle Size	USP Classification	pH range	Temperature limit
Phenyl-Hexyl		13%	300	Yes	120Å	3,3.5 5,10µm	L11	2-8	60°C (Low pH) 40°C (High pH)

◆ Application Cases

Determination of Sinapine thiocyanate Content in Radish Seeds

Methodology: Pharmacopoeia of the People's Republic of China 2020

Column: MicroPulite® Gold Phenyl-Hexyl 5µm 250*4.6mm

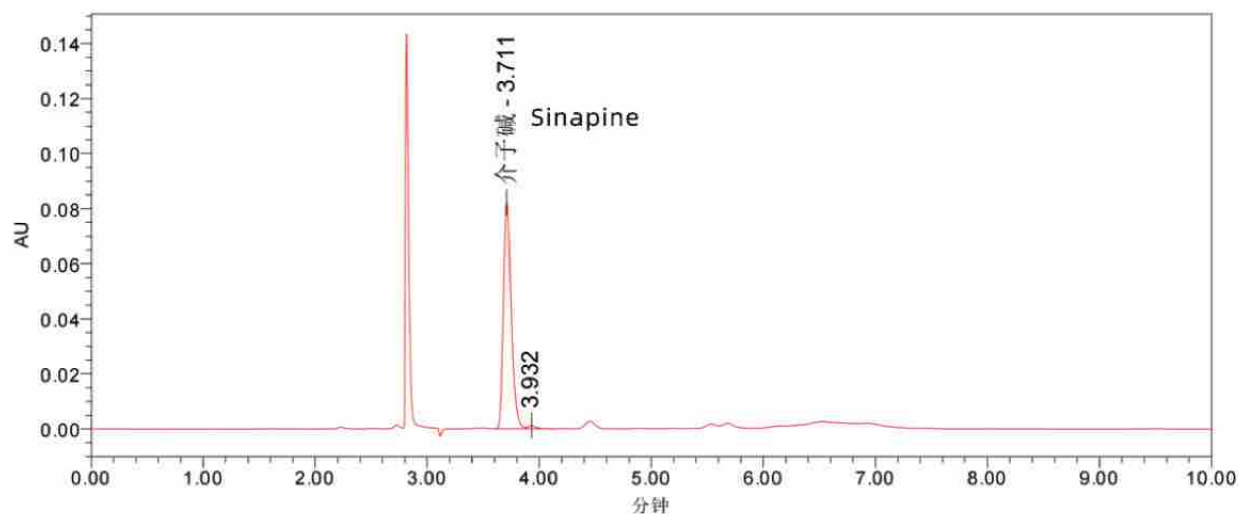
Wavelength: UV 326nm

Flow rate: 1.0mL/min

Column temperature: 35°C

Mobile phase: Acetonitrile-3% Glacial Acetic Acid = (15: 85)

Chromatogram:



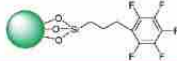
MicroPulite® Gold Phenyl- Hexyl Ordering Information

Particle Size: 3 µm		Particle Size: 3.5 µm		Particle Size: 5 µm	
Size	Part No	Size	Part No	Size	Part No
30x2.1mm	GDPH-032130	30x2.1mm	GDPH-032135	30x2.1mm	GDPH-032150
50x2.1mm	GDPH-052130	50x2.1mm	GDPH-052135	50x2.1mm	GDPH-052150
100x2.1mm	GDPH-102130	100x2.1mm	GDPH-102135	100x2.1mm	GDPH-102150
150x2.1mm	GDPH-152130	150x2.1mm	GDPH-152135	150x2.1mm	GDPH-152150
30x3.0mm	GDPH-033030	30x3.0mm	GDPH-033035	30x3.0mm	GDPH-033050
50x3.0mm	GDPH-053030	50x3.0mm	GDPH-053035	50x3.0mm	GDPH-053050
100x3.0mm	GDPH-103030	100x3.0mm	GDPH-103035	100x3.0mm	GDPH-103050
150x3.0mm	GDPH-153030	150x3.0mm	GDPH-153035	150x3.0mm	GDPH-153050
250x3.0mm	GDPH-253030	250x3.0mm	GDPH-253035	250x3.0mm	GDPH-253050
30x4.6mm	GDPH-034630	30x4.6mm	GDPH-034635	30x4.6mm	GDPH-034650
50x4.6mm	GDPH-054630	50x4.6mm	GDPH-054635	50x4.6mm	GDPH-054650
100x4.6mm	GDPH-104630	100x4.6mm	GDPH-104635	100x4.6mm	GDPH-104650
150x4.6mm	GDPH-154630	150x4.6mm	GDPH-154635	150x4.6mm	GDPH-154650
200x4.6mm	GDPH-204630	200x4.6mm	GDPH-204635	200x4.6mm	GDPH-204650
250x4.6mm	GDPH-254630	250x4.6mm	GDPH-254635	250x4.6mm	GDPH-254650

Particle Size: 5 µm		Particle Size: 10 µm	
Size	Part No	Size	Part No
150x10mm	GDPH-1510050	150x10mm	GDPH-15100100
250x10mm	GDPH-2510050	250x10mm	GDPH-25100100
150x20mm	GDPH-1520050	150x20mm	GDPH-15200100
250x20mm	GDPH-2520050	250x20mm	GDPH-25200100
150x21.2mm	GDPH-1521250	150x21.2mm	GDPH-15212100
250x21.2mm	GDPH-2521250	250x21.2mm	GDPH-25212100
150x30mm	GDPH-1530050	150x30mm	GDPH-15300100
250x30mm	GDPH-2530050	250x30mm	GDPH-25300100

MicroPulite® Gold PFP Column

Gold PFP is pentafluorophenyl bonded to silica. It is influenced by hydrogen bonding, dipole-dipole interactions, aromatic and π - π , hydrophobicity, etc. Gold PFP has a unique selectivity and is suitable for the analysis of aromatic compounds, halogenated compounds, and planar positional isomers, etc. and it can enhance retention of polar compounds.

Stationary Phase	Bonded Phase	Carbon Load	Surface area	Endcapped	Pore Size	Particle Size	USP Classification	pH range	Temperature limit
PFP		10%	300	Yes	120Å	3,3.5 5,10µm	L43	2-8	60°C (Low pH) 40°C (High pH)

◆ Application Cases

Phenyl methyl sulfone and phenyl methyl sulfoxide

Column: MicroPulite® Gold PFP 5µm 250*4.6mm

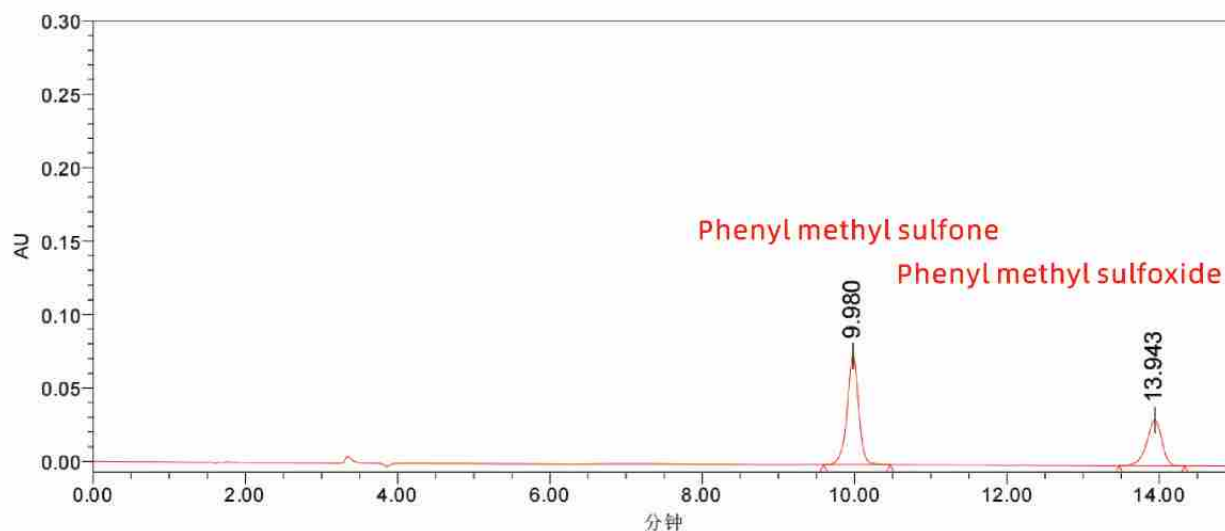
Wavelength: UV 210nm

Flow rate: 1.0mL/min

Column temperature: 40°C

Mobile phase: Acetonitrile-Water = (15: 85)

Chromatogram:



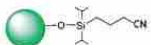
MicroPulite® Gold PFP Ordering Information

Particle Size: 3 µm		Particle Size: 3.5 µm		Particle Size: 5 µm	
Size	Part No	Size	Part No	Size	Part No
30x2.1mm	GDPFP-032130	30x2.1mm	GDPFP-032135	30x2.1mm	GDPFP-032150
50x2.1mm	GDPFP-052130	50x2.1mm	GDPFP-052135	50x2.1mm	GDPFP-052150
100x2.1mm	GDPFP-102130	100x2.1mm	GDPFP-102135	100x2.1mm	GDPFP-102150
150x2.1mm	GDPFP-152130	150x2.1mm	GDPFP-152135	150x2.1mm	GDPFP-152150
30x3.0mm	GDPFP-033030	30x3.0mm	GDPFP-033035	30x3.0mm	GDPFP-033050
50x3.0mm	GDPFP-053030	50x3.0mm	GDPFP-053035	50x3.0mm	GDPFP-053050
100x3.0mm	GDPFP-103030	100x3.0mm	GDPFP-103035	100x3.0mm	GDPFP-103050
150x3.0mm	GDPFP-153030	150x3.0mm	GDPFP-153035	150x3.0mm	GDPFP-153050
250x3.0mm	GDPFP-253030	250x3.0mm	GDPFP-253035	250x3.0mm	GDPFP-253050
30x4.6mm	GDPFP-034630	30x4.6mm	GDPFP-034635	30x4.6mm	GDPFP-034650
50x4.6mm	GDPFP-054630	50x4.6mm	GDPFP-054635	50x4.6mm	GDPFP-054650
100x4.6mm	GDPFP-104630	100x4.6mm	GDPFP-104635	100x4.6mm	GDPFP-104650
150x4.6mm	GDPFP-154630	150x4.6mm	GDPFP-154635	150x4.6mm	GDPFP-154650
200x4.6mm	GDPFP-204630	200x4.6mm	GDPFP-204635	200x4.6mm	GDPFP-204650
250x4.6mm	GDPFP-254630	250x4.6mm	GDPFP-254635	250x4.6mm	GDPFP-254650

Particle Size: 5 µm		Particle Size: 10 µm	
Size	Part No	Size	Part No
150x10mm	GDPFP-1510050	150x10mm	GDPFP-15100100
250x10mm	GDPFP-2510050	250x10mm	GDPFP-25100100
150x20mm	GDPFP-1520050	150x20mm	GDPFP-15200100
250x20mm	GDPFP-2520050	250x20mm	GDPFP-25200100
150x21.2mm	GDPFP-1521250	150x21.2mm	GDPFP-15212100
250x21.2mm	GDPFP-2521250	250x21.2mm	GDPFP-25212100
150x30mm	GDPFP-1530050	150x30mm	GDPFP-15300100
250x30mm	GDPFP-2530050	250x30mm	GDPFP-25300100

MicroPulite® Gold CN Column

Gold CN can be used in both normal and reverse phase conditions. Compounds have strong hydrophobic retention on C18/C8 and are difficult to elute, they can be analyzed with cyano column. Gold CN provides a different selectivity from C18/C8/C4/phenyl, and is used to analyze compounds that contain carboxyl, hydroxyl, and amine groups.

Stationary Phase	Bonded Phase	Carbon Load	Surface area	Endcapped	Pore Size	Particle Size	USP Classification	pH range	Temperature limit
CN		5%	300	Yes	120Å	5µm	L10	2-8	45°C (Low pH) 45°C (High pH)

◆ Application Cases

Gynecological Regenerative Capsule - Paeoniflorin Assay

Methodology: Enterprise Standard

Column: MicroPulite® Gold CN 5µm 250*4.6mm

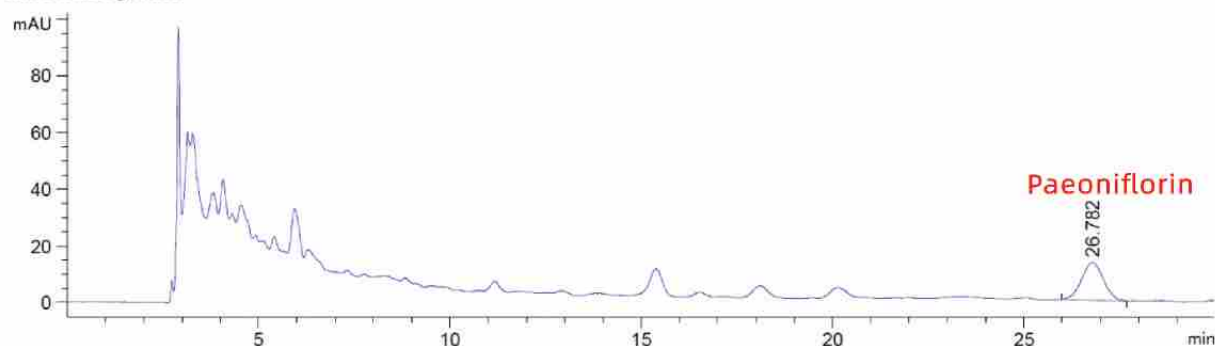
Wavelength: UV 230nm

Flow rate: 1.0mL/min

Column temperature: 30°C

Mobile phase: Methanol- Water= (11: 89)

Chromatogram:



MicroPulite® Gold CN Ordering Information

Particle Size: 5 µm	
Size	Part No
30x2.1mm	GDCN-032150
50x2.1mm	GDCN-052150
100x2.1mm	GDCN-102150
150x2.1mm	GDCN-152150
30x3.0mm	GDCN-033050
50x3.0mm	GDCN-053050
100x3.0mm	GDCN-103050
150x3.0mm	GDCN-153050
250x3.0mm	GDCN-253050
30x4.6mm	GDCN-034650
50x4.6mm	GDCN-054650
100x4.6mm	GDCN-104650
150x4.6mm	GDCN-154650
200x4.6mm	GDCN-204650
250x4.6mm	GDCN-254650

MicroPulite® Platinum Series: New standard for silica columns

Platinum columns have high carbon load and large surface area, so they have excellent sample loading capacity, and use as general purpose C18/C8 columns .

- Silica matrix columns with high sample loading capacity
- Excellent peak shape and high column efficiency at low pH
- Better peak shape for basic compounds

Stationary Phase	Bonded Phase	Carbon Load	Pore Size	Particle Size	USP Classification	pH range	Temperature limit
Platinum C18	Special C18	16%	100Å	3.5, 5µm	L1	1-8	50°C (Low pH) 40°C (High pH)
Platinum C18	Special C8	12%	100Å	3.5, 5µm	L7	1-8	40°C (Low pH) 40°C (High pH)

MicroPulite® Platinum C18 Column

With unique bonded and endcapped technology , Platinum C18 provides symmetrical peak shapes for acid, basic, and neutral compounds when used in low/medium pH mobile phase conditions. Platinum C18 also has a superior stability when used in low pH conditions, so it has ideal column life.

Stationary Phase	Bonded Phase	Carbon Load	Surface area	End-capped	Pore Size	Particle Size	USP Classification	pH range	Temperature limit
C18	Special C18	16%	320	Yes	120Å	3.5,5µm	L1	1-8	50°C (Low pH) 40°C (High pH)

◆ Application Cases

Determination of Related Substances of Paclitaxel Injection

Method: Pharmacopoeia of the People's Republic of China 2020

Column: MicroPulite® Platinum C18 4.6*250mm 5.0µm(Part No: PTC18-254650)

Wavelength: UV 227nm

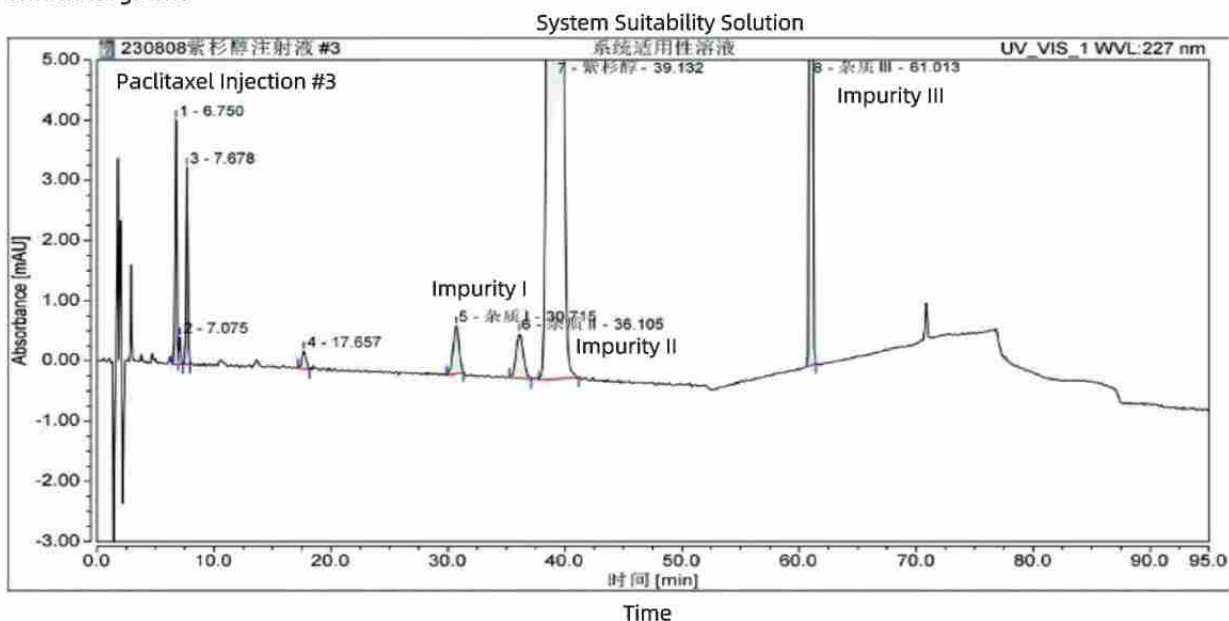
Flow rate: 1.5mL/min

Column temperature: 30°C

Mobile phase: Phase A: water ; Phase B: acetonitrile

t(min)	A%	B%
0	60	40
25	20	80
35	60	40
45	60	40

Chromatogram:



◆ Application Cases

Determination of Related Substances in of loxacin and Sodium Chloride Injection

Methodology: Pharmacopoeia of the People's Republic of China 2020

Column: MicroPulite® Platinum C18 5μm 250*4.6mm

Wavelength: UV 294nm;238nm

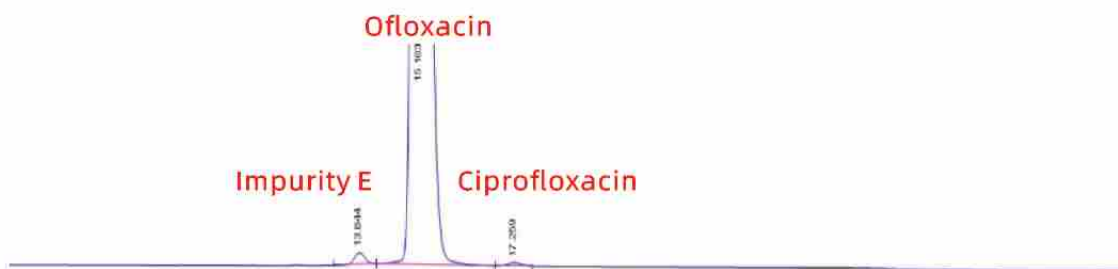
Flow rate: 1.0mL/min

Column temperature: 40°C

Mobile phase: Ammonium Acetate and Sodium Perchlorate Solution (Dissolve 4.0g ammonium acetate and 7.0g of sodium perchlorate in 1300mL water, and adjust the pH to 2.2 with phosphoric acid); Mobile Phase B: Acetonitrile.

gradient elution: 0min:0%B; 18min:0%B; 25min:30%B; 39min:30%B; 40min0:%B; 50min:0%B.

System applicability solution (294nm)



Impurity A Reference Solution (238nm)



MicroPulite® Platinum C18 Ordering Information

Particle Size: 3.5 µm	
Size	Part No
30x2.1mm	PTC18-032135
50x2.1mm	PTC18-052135
100x2.1mm	PTC18-102135
150x2.1mm	PTC18-152135
30x3.0mm	PTC18-033035
50x3.0mm	PTC18-053035
100x3.0mm	PTC18-103035
150x3.0mm	PTC18-153035
250x3.0mm	PTC18-253035
30x4.6mm	PTC18-034635
50x4.6mm	PTC18-054635
100x4.6mm	PTC18-104635
150x4.6mm	PTC18-154635
200x4.6mm	PTC18-204635
250x4.6mm	PTC18-254635

Particle Size: 5 µm	
Size	Part No
30x2.1mm	PTC18-032150
50x2.1mm	PTC18-052150
100x2.1mm	PTC18-102150
150x2.1mm	PTC18-152150
30x3.0mm	PTC18-033050
50x3.0mm	PTC18-053050
100x3.0mm	PTC18-103050
150x3.0mm	PTC18-153050
250x3.0mm	PTC18-253050
30x4.6mm	PTC18-034650
50x4.6mm	PTC18-054650
100x4.6mm	PTC18-104650
150x4.6mm	PTC18-154650
200x4.6mm	PTC18-204650
250x4.6mm	PTC18-254650

Particle Size: 5 µm	
Size	Part No
150x10mm	PTC18-1510050
250x10mm	PTC18-2510050
150x20mm	PTC18-1520050
250x20mm	PTC18-2520050
150x21.2mm	PTC18-1521250
250x21.2mm	PTC18-2521250
150x30mm	PTC18-1530050
250x30mm	PTC18-2530050

Particle Size: 10 µm	
Size	Part No
150x10mm	PTC18-15100100
250x10mm	PTC18-25100100
150x20mm	PTC18-15200100
250x20mm	PTC18-25200100
150x21.2mm	PTC18-15212100
250x21.2mm	PTC18-25212100
150x30mm	PTC18-15300100
250x30mm	PTC18-25300100

MicroPulite® Platinum C8 Column

Platinum C8 also offers excellent stability and symmetrical peak shapes at low pH, is suitable for the analysis of strongly hydrophobic compounds.

Stationary Phase	Bonded Phase	Carbon Load	Surface area	End-capped	Pore Size	Particle Size	USP Classification	pH range	Temperature limit
C8	Special 18	12%	320	Yes	100Å	3.5,5,10 µm	L7	1-8	40°C (Low pH) 40°C (High pH)

MicroPulite® Platinum C8 Ordering Information

Particle Size: 3.5 µm	
Size	Part No
30x2.1mm	PTC08-032135
50x2.1mm	PTC08-052135
100x2.1mm	PTC08-102135
150x2.1mm	PTC08-152135
30x3.0mm	PTC08-033035
50x3.0mm	PTC08-053035
100x3.0mm	PTC08-103035
150x3.0mm	PTC08-153035
250x3.0mm	PTC08-253035
30x4.6mm	PTC08-034635
50x4.6mm	PTC08-054635
100x4.6mm	PTC08-104635
150x4.6mm	PTC08-154635
200x4.6mm	PTC08-204635
250x4.6mm	PTC08-254635

Particle Size: 5 µm	
Size	Part No
30x2.1mm	PTC08-032150
50x2.1mm	PTC08-052150
100x2.1mm	PTC08-102150
150x2.1mm	PTC08-152150
30x3.0mm	PTC08-033050
50x3.0mm	PTC08-053050
100x3.0mm	PTC08-103050
150x3.0mm	PTC08-153050
250x3.0mm	PTC08-253050
30x4.6mm	PTC08-034650
50x4.6mm	PTC08-054650
100x4.6mm	PTC08-104650
150x4.6mm	PTC08-154650
200x4.6mm	PTC08-204650
250x4.6mm	PTC08-254650

Particle Size: 5 µm	
Size	Part No
150x10mm	PTC08-1510050
250x10mm	PTC08-2510050
150x20mm	PTC08-1520050
250x20mm	PTC08-2520050
150x21.2mm	PTC08-1521250
250x21.2mm	PTC08-2521250
150x30mm	PTC08-1530050
250x30mm	PTC08-2530050

Particle Size: 10 µm	
Size	Part No
150x10mm	PTC08-15100100
250x10mm	PTC08-25100100
150x20mm	PTC08-15200100
250x20mm	PTC08-25200100
150x21.2mm	PTC08-15212100
250x21.2mm	PTC08-25212100
150x30mm	PTC08-15300100
250x30mm	PTC08-25300100

MicroPulite® XP Series:

Hybrid silica makes method development more flexible

Silica has become the most widely used material for columns due to its excellent mechanical strength and easy surface modification, etc. However, pure silica matrix is extremely unstable under high pH conditions (especially above pH 8), which affects the service life of the columns. XP series columns adopt hybrid silica technology, combining the characteristics of organic and inorganic materials, the columns not only retains the characteristics of pure silica, but also has the characteristics of polymer materials, such as stable in wider pH range and low activity of silanol. XP series columns not only own the perfect performance of separation, but also own the longer column life. From analysis to preparation, XP series columns can be matched to all instrument platforms, and multiple specification are available to ensure method continue and transfer, thus improving work efficiency.

◆ Characteristic

- Structurally hybrid silica, improves the pH tolerance range
- Patented triple bonded and unique endcapped, ensure high column efficiency and excellent peak shape
- The multiple bonded phase can provide the selectivity of method development, reduce the difficulty of method development
- Strict quality control ensure the stability of materials between columns and batches

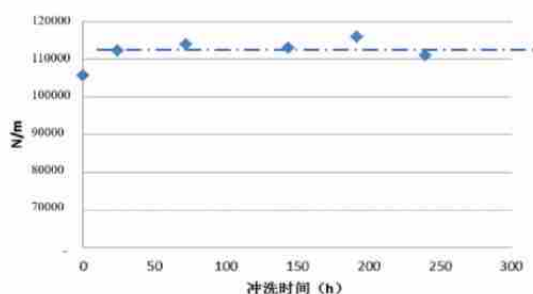
Stationary Phase	Bonded Phase	Carbon Load	Pore Size	Particle Size	USP Classification	pH range	Temperature limit
XP tC18		18%	130Å	1.7,2.5,3.3,5, 5,7,10µm	L1	1-12	80°C (Low pH) 60°C (High pH)
XP tC8		13%	130Å	1.7,2.5,3.3,5, 5,7,10µm	L7	1-12	60°C (Low pH) 60°C (High pH)
XP tC4		9.5%	130Å	1.7,2.5,3.3,5, 5,7,10µm	L26	1-10	80°C (Low pH) 50°C (High pH)
XP RP18		18%	130Å	1.7,2.5,3, 3.5,5,10µm	L1	2-11	50°C (Low pH) 45°C (High pH)
XP RP18 Plus		17%	130Å	1.7, 2.5, 3, 3.5, 5, 7, 10 µm	L1	2-11	50°C (Low pH) 45°C (High pH)
XP NH ₂		9%	130Å	3.5,5µm	L8	1-9	45°C (Low pH) 45°C (High pH)
XP T3		14%	130Å	3.5, 5, 7, 10 µm	µm	1-12	80°C (Low pH) 60°C (High pH)
XP Phenyl-Hexyl		15%	130Å	1.7,2.5,3, 3.5,5,7,10µm	L11	1-12	80°C (Low pH) 60°C (High pH)
XP Amide		12%	130Å	1.7,2.5,3, 3.5,5,7,10µm	L68	2-11	90°C (Low pH) 90°C (High pH)
XP HILIC		-	130Å	1.7,2.5,3, 3.5,5,7,10µm	L3	1-9	45°C (Low pH) 45°C (High pH)
XP Oligo tC18		18%	130Å	1.7,2.5,3, 3.5,5,7,10µm	L1	1-12	80°C (Low pH) 60°C (High pH)
XP tPFP		7%	130Å	1.7,2.5,3, 3.5,5,7,10µm	L43	1-8	45°C (Low pH) 45°C (High pH)
XP tC18/PFP		14.5%	130Å	1.7,2.5,3, 3.5,5,7,10µm	L1	1-12	45°C (Low pH) 45°C (High pH)
XP tC18-AX		17%	130Å	1.7,2.5,3, 3.5,5,7,10µm	L78	2-10	60°C (LOW PH) 60°C (HIGH PH)

Patent number: CN 104725641 A, CN 101927154 A

Stable in wide pH

Excellent durability at high pH

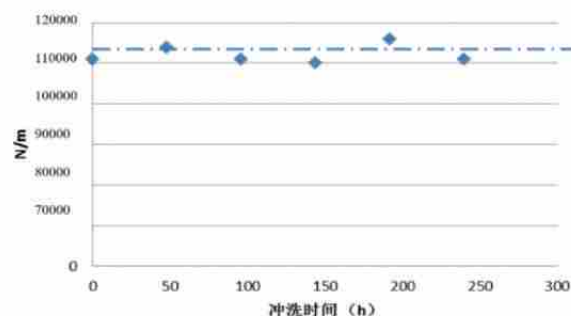
Under alkaline conditions, silica material may occur nucleophilic substitution because of hydroxide root, result in silica dissolution and the bonded phase hydrolysis, even leads to the column efficiency decrease. The hybrid silica technology makes the basic skeleton of silica much more tolerant under high pH conditions, and nucleophilic substitution reactions more difficult to occur, so the rate of dissolution on the particle surface slow down, the column life can be extended. In the classic durability test of XP tC18 at high pH, the result shows that XP tC18 still maintains its original column performance after 240 hours of use at 50°C and pH=10.



The durability test at methanol/triethylamine 7/3, pH=10, 50°C

Improved Stability at low pH

When the column used for a long time in low pH mobile phases, the bonded phase of column may occur to hydrolysis and changes of retention time. XP tC18 adopts patented triple-bonded modification, can improve stability and reproducibility at low pH. In the durability test at low pH, XP tC18 was found to be stable at 50°C and pH1 for 240 hours.



The durability test at methanol/trifluoroacetic acid 7/3, pH 1, 50°C.

Excellent stability of batch to batch

In order to achieve consistent separation results, Micropure strictly controls every aspect of the production process to ensure the quality of the product. Through testing the column efficiency and the retention time of more than twenty different batches, the results show the deviations between batches are all controlled within reasonable limits.



Column efficiency stability study between batches Retention time stability study between batches

MicroPulite® XP tC18 Column

As a general-purpose column, XP tC18 is suitable for a wide range of analytes. It can be used in a wide pH range from pH 1-12, and can tolerate higher column temperatures than silica columns, as well as be able to used under mobile phases with different concentrations of buffer salts and ion-pairing reagents, so it is the best choice for method development.

Stationary Phase	Bonded Phase	Carbon Load	Surface area	End-capped	Pore Size	Particle Size	USP Classification	pH range	Temperature limit
XP tC18		18%	185	Yes	130Å	1.7, 2.5, 3, 3.5, 5, 7, 10µm	L1	1-12	80°C (Low pH) 60°C (High pH)

◆ Application Cases

Determination of Related Substances of Vitamin B12 injection

Column: MicroPulite® XP tC18 5µm 250*4.6mm

Wavelength: UV 361nm

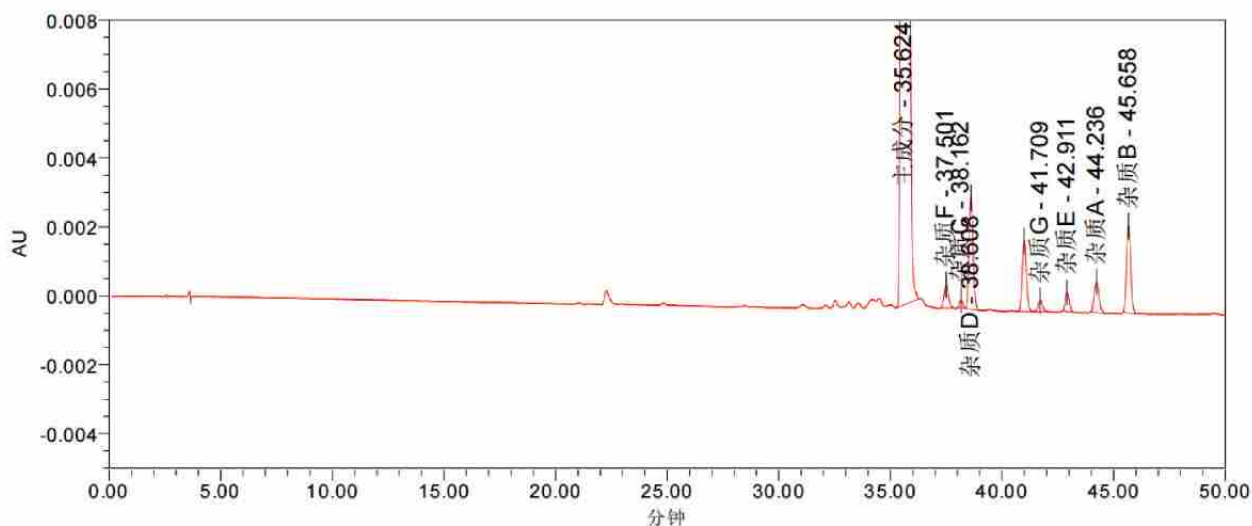
Flow rate: 1.0mL/min

Column temperature: 35°C

Mobile phase: A: 1.0 g/L ammonium formate, pH 3.5; B: Acetonitrile

t/min	A%	B%
0	96	4
50	86	14

Chromatogram:



Determination of Related Substances I of Faropenem Sodium

Method:

Column: MicroPulite® XP tC18 5μm 250*4.6mm

Wavelength: UV 240nm

Flow rate: 1.0mL/min

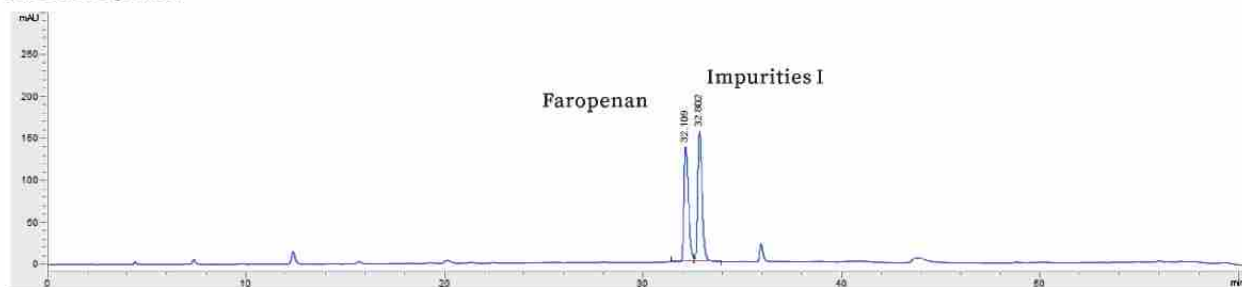
Column temperature: 40°C

Mobile phase: A: Phosphate buffer solution (take 6.12g potassium dihydrogen phosphate, 1.79g sodium dihydrogen phosphate, and 1.61g tetrabutylammonium bromide, dissolve in water and dilute to 1000mL);

B: Phosphate buffer acetonitrile (50:50)

t/min	A%	B%
0	84	16
25	70	30
35	50	50
54	30	70
55	84	16
64	84	16

Chromatogram:



The Characteristic chromatogram of Pueraria Mirifica Formulated Granule

Method: National Drug Standard for Chinese Medicine Formula Granules (Good Batch)

Column: MicroPulite® XP tC18 1.7µm 2.1*100mm (Part No: XPtC18-102117)

Wavelength: UV 250nm

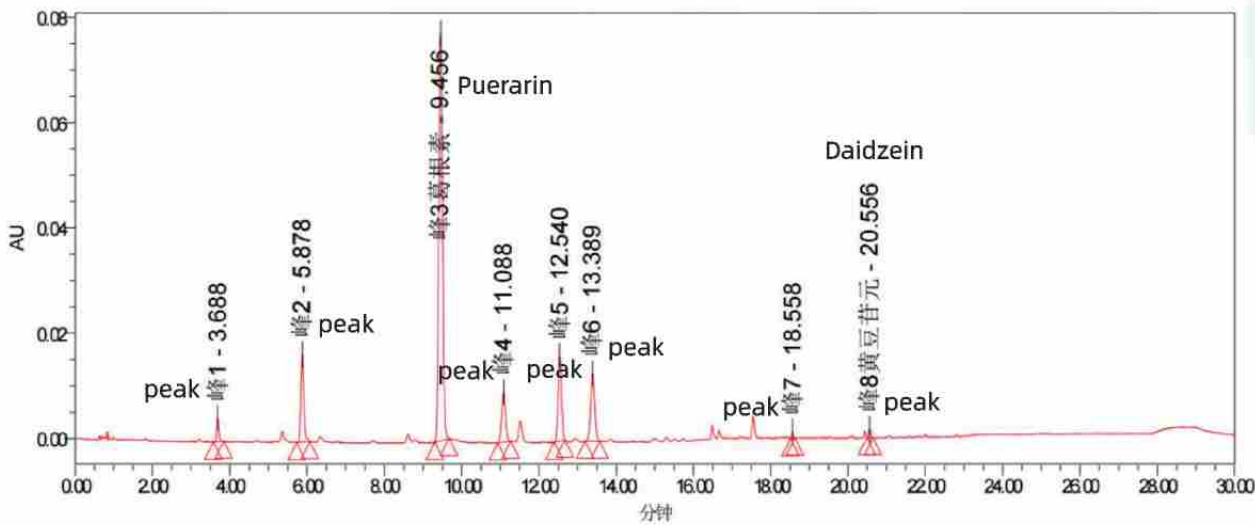
Flow rate: 0.4mL/min

Column temperature: 30°C

Mobile phase: Phase A: Acetonitrile; Phase B: 0.1% phosphoric acid solution

t(min)	A%	B%
0	6	94
10	9	91
14	11	89
22	30	70
27	30	70

Chromatogram:



Easy transfer from analysis to semi-preparation

The XP series has preparative/semi-preparative columns with the same bonded phase, separation selectivity and performance as the analysis columns. It can be scaled up directly from analysis to preparative, and provide in a variety of particle sizes, diameters and lengths to meet the needs of different separation platforms. In the case of toluene, for example, the method was transferred from 5 μ m XP tC18 analysis column to 10 μ m preparative column, there was no significant difference in the retention time, peak shape and column efficiency of toluene.

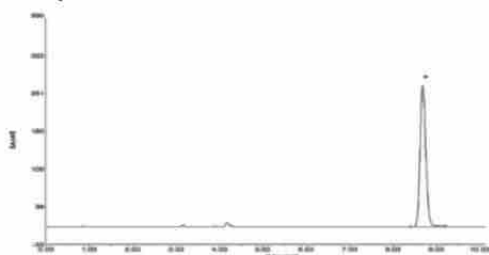
Wavelength: 254nm

Mobile phase: 70% acetonitrile/30%water

Flow rate: Equal proportion to volume

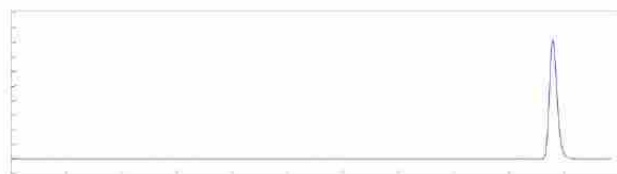
Sample: Toluene

Analysis column: MicroPulite® XP tC18 4.6*250mm 5 μ m



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 10 μ m



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

MicroPulite®XP tC18 Ordering Information

Particle Size: 1.7 µm	
Size	Part No
30x 2.1 mm	XPtC18-032117
50x 2.1 mm	XPtC18-052117
100x 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	Part No
30x 2.1 mm	XPtC18-032125
50x 2.1 mm	XPtC18-052125
100x 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
200 x 4.6 mm	XPtC18-204625
250 x 4.6 mm	XPtC18-254625

Particle Size: 3 µm	
Size	Part No
30x 2.1 mm	XPtC18-032130
50x 2.1 mm	XPtC18-052130
100x 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
200 x 4.6 mm	XPtC18-204630
250 x 4.6 mm	XPtC18-254630

Particle Size: 3.5 µm	
Size	Part No
30x 2.1 mm	XPtC18-032135
50x 2.1 mm	XPtC18-052135
100x 2.1 mm	XPtC18-102135
150 x 2.1 mm	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
200 x 4.6 mm	XPtC18-204635
250 x 4.6 mm	XPtC18-254635

Particle Size: 5 µm	
Size	Part No
30x 2.1 mm	XPtC18-032150
50x 2.1 mm	XPtC18-052150
100x 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
200 x 4.6 mm	XPtC18-204650
250 x 4.6 mm	XPtC18-254650

Particle Size: 5 µm	
Size	Part No
150 x 10 mm	XPtC18-1510050
250 x 10 mm	XPtC18-2510050
150 x 20 mm	XPtC18-1520050
250 x 20 mm	XPtC18-2520050
150 x 21.2 mm	XPtC18-1521250
250 x 21.2 mm	XPtC18-2521250
150 x 30 mm	XPtC18-1530050
250 x 30 mm	XPtC18-2530050
150 x 50 mm	XPtC18-1550050
250 x 50 mm	XPtC18-2550050

Particle Size: 7 µm	
Size	Part No
150 x 10 mm	XPtC18-1510070
250 x 10 mm	XPtC18-2510070
150 x 20 mm	XPtC18-1520070
250 x 20 mm	XPtC18-2520070
150 x 21.2 mm	XPtC18-1521270
250 x 21.2 mm	XPtC18-2521270
150 x 30 mm	XPtC18-1530070
250 x 30 mm	XPtC18-2530070
150 x 50 mm	XPtC18-1550070
250 x 50 mm	XPtC18-2550070

Particle Size: 10 µm	
Size	Part No
150 x 10 mm	XPtC18-15100100
250 x 10 mm	XPtC18-25100100
150 x 20 mm	XPtC18-15200100
250 x 20 mm	XPtC18-25200100
150 x 21.2 mm	XPtC18-15212100
250 x 21.2 mm	XPtC18-25212100
150 x 30 mm	XPtC18-15300100
250 x 30 mm	XPtC18-25300100
150 x 50 mm	XPtC18-15500100
250 x 50 mm	XPtC18-25500100

MicroPulite® XP tC8 Column

XP tC8 can be used for a wide range of analytes in the pH 1-12, and provides good peak shape, column efficiency and chemical stability for compounds.

Stationary Phase	Bonded Phase	Carbon Load	Surface area	End-capped	Pore Size	Particle Size	USP Classification	pH range	Temperature limit
tC8		13%	185	Yes	130Å	1.7, 2.5, 3, 3.5, 5, 7, 10µm	L7	1-12	60°C (Low pH) 60°C (High pH)

◆ Application Cases

Quetiapine Fumarate Tablets Dissolution Assay

Column: MicroPulite® XP tC8 5µm 100*4.6mm

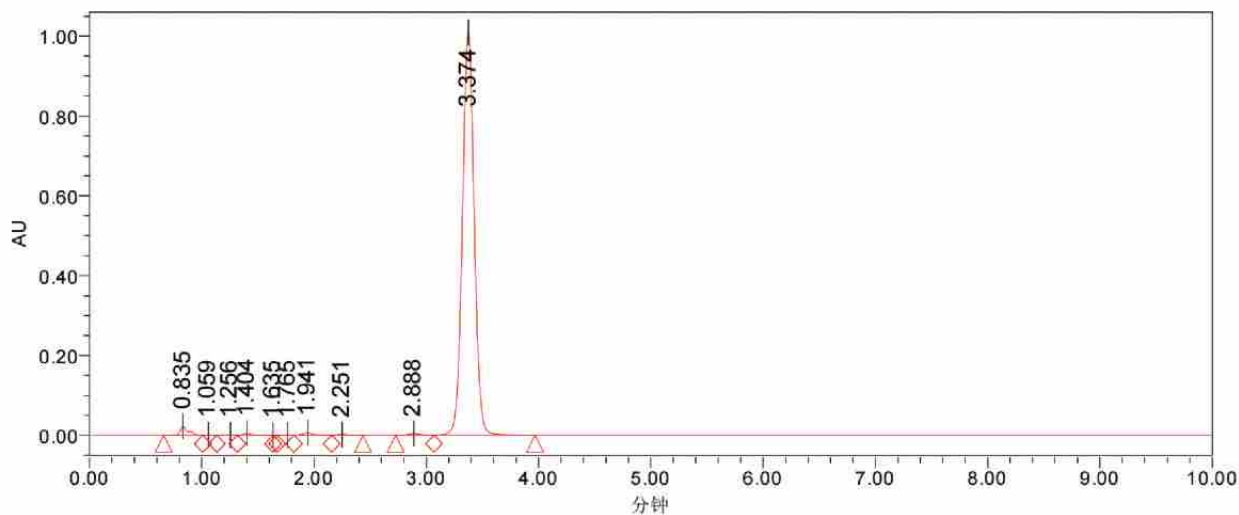
Wavelength: UV 230nm

Flow rate: 1.5mL/min

Column temperature: 30°C

Methanol: Acetonitrile: 20mM diammonium hydrogen phosphate

Chromatogram:



MicroPulite®XP tC8 Ordering Information

Particle Size: 1.7 µm		Particle Size: 2.5 µm		Particle Size: 3 µm	
Size	Part No	Size	Part No	Size	Part No
30x 2.1 mm	XPtC08-032117	30x 2.1 mm	XPtC08-032125	30x 2.1 mm	XPtC08-032130
50x 2.1 mm	XPtC08-052117	50x 2.1 mm	XPtC08-052125	50x 2.1 mm	XPtC08-052130
100x 2.1 mm	XPtC08-102117	100x 2.1 mm	XPtC08-102125	100x 2.1 mm	XPtC08-102130
150 x 2.1 mm	XPtC08-152117	150 x 2.1 mm	XPtC08-152125	150 x 2.1 mm	XPtC08-152130
30 x 3.0 mm	XPtC08-033017	30 x 3.0 mm	XPtC08-033025	30 x 3.0 mm	XPtC08-033030
50 x 3.0 mm	XPtC08-053017	50 x 3.0 mm	XPtC08-053025	50 x 3.0 mm	XPtC08-053030
100 x 3.0 mm	XPtC08-103017	100 x 3.0 mm	XPtC08-103025	100 x 3.0 mm	XPtC08-103030
150 x 3.0 mm	XPtC08-153017	150 x 3.0 mm	XPtC08-153025	150 x 3.0 mm	XPtC08-153030
		250 x 3.0 mm	XPtC08-253025	250 x 3.0 mm	XPtC08-253030
		30 x 4.6 mm	XPtC08-034625	30 x 4.6 mm	XPtC08-034630
		50 x 4.6 mm	XPtC08-054625	50 x 4.6 mm	XPtC08-054630
		100 x 4.6 mm	XPtC08-104625	100 x 4.6 mm	XPtC08-104630
		150 x 4.6 mm	XPtC08-154625	150 x 4.6 mm	XPtC08-154630
		200 x 4.6 mm	XPtC08-204625	200 x 4.6 mm	XPtC08-204630
		250 x 4.6 mm	XPtC08-254625	250 x 4.6 mm	XPtC08-254630

Particle Size: 3.5 µm		Particle Size: 5 µm	
Size	Part No	Size	Part No
30x 2.1 mm	XPtC08-032135	30x 2.1 mm	XPtC08-032150
50x 2.1 mm	XPtC08-052135	50x 2.1 mm	XPtC08-052150
100x 2.1 mm	XPtC08-102135	100x 2.1 mm	XPtC08-102150
150 x 2.1 mm	XPtC08-152135	150 x 2.1 mm	XPtC08-152150
30 x 3.0 mm	XPtC08-033035	30 x 3.0 mm	XPtC08-033050
50 x 3.0 mm	XPtC08-053035	50 x 3.0 mm	XPtC08-053050
100 x 3.0 mm	XPtC08-103035	100 x 3.0 mm	XPtC08-103050
150 x 3.0 mm	XPtC08-153035	150 x 3.0 mm	XPtC08-153050
250 x 3.0 mm	XPtC08-253035	250 x 3.0 mm	XPtC08-253050
30 x 4.6 mm	XPtC08-034635	30 x 4.6 mm	XPtC08-034650
50 x 4.6 mm	XPtC08-054635	50 x 4.6 mm	XPtC08-054650
100 x 4.6 mm	XPtC08-104635	100 x 4.6 mm	XPtC08-104650
150 x 4.6 mm	XPtC08-154635	150 x 4.6 mm	XPtC08-154650
200 x 4.6 mm	XPtC08-204635	200 x 4.6 mm	XPtC08-204650
250 x 4.6 mm	XPtC08-254635	250 x 4.6 mm	XPtC08-254650

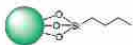
Particle Size: 5 μ m	
Size	Part No
150 x 10 mm	XPtC08-1510050
250 x 10 mm	XPtC08-2510050
150 x 20 mm	XPtC08-1520050
250 x 20 mm	XPtC08-2520050
150 x 21.2 mm	XPtC08-1521250
250 x 21.2 mm	XPtC08-2521250
150 x 30 mm	XPtC08-1530050
250 x 30 mm	XPtC08-2530050
150 x 50 mm	XPtC08-1550050
250 x 50 mm	XPtC08-2550050

Particle Size: 7 μ m	
Size	Part No
150 x 10 mm	XPtC08-1510070
250 x 10 mm	XPtC08-2510070
150 x 20 mm	XPtC08-1520070
250 x 20 mm	XPtC08-2520070
150 x 21.2 mm	XPtC08-1521270
250 x 21.2 mm	XPtC08-2521270
150 x 30 mm	XPtC08-1530070
250 x 30 mm	XPtC08-2530070
150 x 50 mm	XPtC08-1550070
250 x 50 mm	XPtC08-2550070

Particle Size: 10 μ m	
Size	Part No
150 x 10 mm	XPtC08-15100100
250 x 10 mm	XPtC08-25100100
150 x 20 mm	XPtC08-15200100
250 x 20 mm	XPtC08-25200100
150 x 21.2 mm	XPtC08-15212100
250 x 21.2 mm	XPtC08-25212100
150 x 30 mm	XPtC08-15300100
250 x 30 mm	XPtC08-25300100
150 x 50 mm	XPtC08-15500100
250 x 50 mm	XPtC08-25500100

MicroPulite® XP tC4 Column

XP tC4 is a butylsilane-bonded hybrid silica column, used in the pH 1-10 for the separation of stronger hydrophobic substances in small molecules, as well as for the reverse-phase analysis of large molecules such as proteins.

Stationary Phase	Bonded Phase	Carbon Load	Surface area	End-capped	Pore Size	Particle Size	USP Classification	pH range	Temperature limit
tC4		9.5%	185	Yes	130Å	1.7, 2.5, 3, 3.5, 5, 7, 10µm	L26	1-10	80°C (Low pH) 50°C (High pH)

MicroPulite®XP tC4 Ordering Information

Particle Size: 1.7 µm		Particle Size: 2.5 µm		Particle Size: 3 µm	
Size	Part No	Size	Part No	Size	Part No
30x 2.1 mm	XPtC04-032117	30x 2.1 mm	XPtC04-032125	30x 2.1 mm	XPtC04-032130
50x 2.1 mm	XPtC04-052117	50x 2.1 mm	XPtC04-052125	50x 2.1 mm	XPtC04-052130
100x 2.1 mm	XPtC04-102117	100x 2.1 mm	XPtC04-102125	100x 2.1 mm	XPtC04-102130
150 x 2.1 mm	XPtC04-152117	150 x 2.1 mm	XPtC04-152125	150 x 2.1 mm	XPtC04-152130
30 x 3.0 mm	XPtC04-033017	30 x 3.0 mm	XPtC04-033025	30 x 3.0 mm	XPtC04-033030
50 x 3.0 mm	XPtC04-053017	50 x 3.0 mm	XPtC04-053025	50 x 3.0 mm	XPtC04-053030
100 x 3.0 mm	XPtC04-103017	100 x 3.0 mm	XPtC04-103025	100 x 3.0 mm	XPtC04-103030
150 x 3.0 mm	XPtC04-153017	150 x 3.0 mm	XPtC04-153025	150 x 3.0 mm	XPtC04-153030
		250 x 3.0 mm	XPtC04-253025	250 x 3.0 mm	XPtC04-253030
		30 x 4.6 mm	XPtC04-034625	30 x 4.6 mm	XPtC04-034630
		50 x 4.6 mm	XPtC04-054625	50 x 4.6 mm	XPtC04-054630
		100 x 4.6 mm	XPtC04-104625	100 x 4.6 mm	XPtC04-104630
		150 x 4.6 mm	XPtC04-154625	150 x 4.6 mm	XPtC04-154630
		200 x 4.6 mm	XPtC04-204625	200 x 4.6 mm	XPtC04-204630
		250 x 4.6 mm	XPtC04-254625	250 x 4.6 mm	XPtC04-254630
Particle Size: 3.5 µm		Particle Size: 5 µm			
Size	Part No	Size	Part No		
30x 2.1 mm	XPtC04-032135	30x 2.1 mm	XPtC04-032150		
50x 2.1 mm	XPtC04-052135	50x 2.1 mm	XPtC04-052150		
100x 2.1 mm	XPtC04-102135	100x 2.1 mm	XPtC04-102150		
150 x 2.1 mm	XPtC04-152135	150 x 2.1 mm	XPtC04-152150		
30 x 3.0 mm	XPtC04-033035	30 x 3.0 mm	XPtC04-033050		
50 x 3.0 mm	XPtC04-053035	50 x 3.0 mm	XPtC04-053050		
100 x 3.0 mm	XPtC04-103035	100 x 3.0 mm	XPtC04-103050		
150 x 3.0 mm	XPtC04-153035	150 x 3.0 mm	XPtC04-153050		
250 x 3.0 mm	XPtC04-253035	250 x 3.0 mm	XPtC04-253050		
30 x 4.6 mm	XPtC04-034635	30 x 4.6 mm	XPtC04-034650		
50 x 4.6 mm	XPtC04-054635	50 x 4.6 mm	XPtC04-054650		
100 x 4.6 mm	XPtC04-104635	100 x 4.6 mm	XPtC04-104650		
150 x 4.6 mm	XPtC04-154635	150 x 4.6 mm	XPtC04-154650		
200 x 4.6 mm	XPtC04-204635	200 x 4.6 mm	XPtC04-204650		
250 x 4.6 mm	XPtC04-254635	250 x 4.6 mm	XPtC04-254650		

Particle Size: 5 μ m	
Size	Part No
150 x 10 mm	XPtC04-1510050
250 x 10 mm	XPtC04-2510050
150 x 20 mm	XPtC04-1520050
250 x 20 mm	XPtC04-2520050
150 x 21.2 mm	XPtC04-1521250
250 x 21.2 mm	XPtC04-2521250
150 x 30 mm	XPtC04-1530050
250 x 30 mm	XPtC04-2530050
150 x 50 mm	XPtC04-1550050
250 x 50 mm	XPtC04-2550050

Particle Size: 7 μ m	
Size	Part No
150 x 10 mm	XPtC04-1510070
250 x 10 mm	XPtC04-2510070
150 x 20 mm	XPtC04-1520070
250 x 20 mm	XPtC04-2520070
150 x 21.2 mm	XPtC04-1521270
250 x 21.2 mm	XPtC04-2521270
150 x 30 mm	XPtC04-1530070
250 x 30 mm	XPtC04-2530070
150 x 50 mm	XPtC04-1550070
250 x 50 mm	XPtC04-2550070

Particle Size: 10 μ m	
Size	Part No
150 x 10 mm	XPtC04-15100100
250 x 10 mm	XPtC04-25100100
150 x 20 mm	XPtC04-15200100
250 x 20 mm	XPtC04-25200100
150 x 21.2 mm	XPtC04-15212100
250 x 21.2 mm	XPtC04-25212100
150 x 30 mm	XPtC04-15300100
250 x 30 mm	XPtC04-25300100
150 x 50 mm	XPtC04-15500100
250 x 50 mm	XPtC04-25500100

MicroPulite® XP RP18 Column

Although the XP RP18 and RP18 Plus have different polar embedded group, but they are compatible and tolerant to 100% water based on the same principle. The XP RP18 has the triple bonded technology, reduces the loss of the bonded phase under high aqueous phase conditions and extends the column life.

Stationary Phase	Bonded Phase	Carbon Load	Surface area	End-capped	Pore Size	Particle Size	USP Classification	pH range	Temperature limit
RP18		18%	185	Yes	130Å	1.7, 2.5, 3, 3.5, 5, 10µm	L1	2-11	50°C (Low pH) 45°C (High pH)

◆ Application Cases

Determination of Luteolin Content

Column: MicroPulite® XP RP18 5µm 150*4.6mm

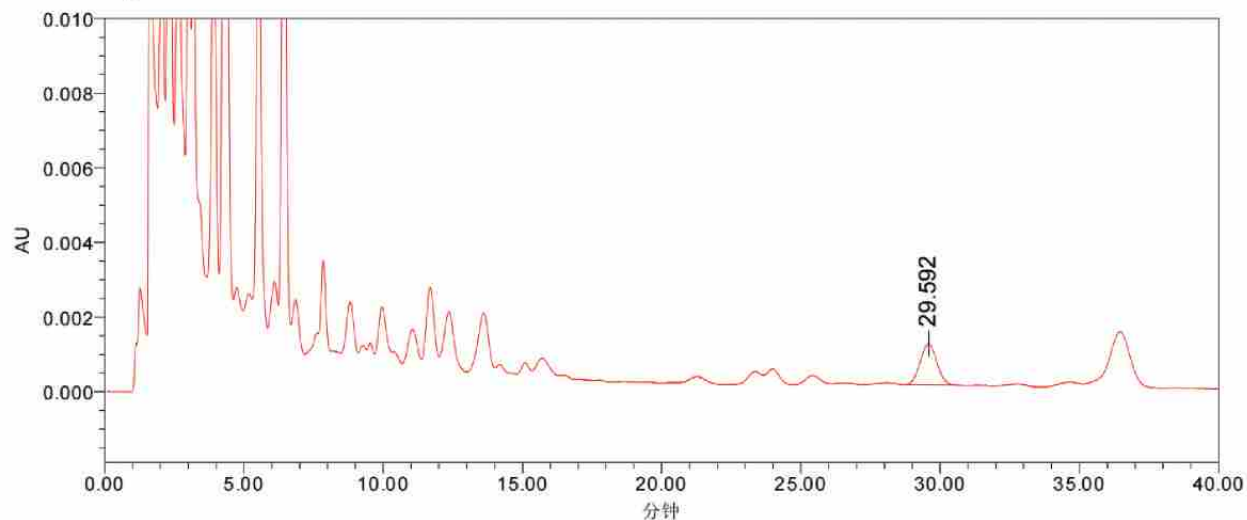
Wavelength: UV 350nm

Flow rate: 1.0mL/min

Column temperature: 40°C

Mobile phase: Methanol-0.1% Phosphoric Acid Solution= (43:57)

Chromatogram:



MicroPulite®XP RP18 Ordering Information

Particle Size: 1.7 µm	
Size	Part No
30x 2.1 mm	XPR18-032117
50x 2.1 mm	XPR18-052117
100x 2.1 mm	XPR18-102117
150x 2.1 mm	XPR18-152117
30 x 3.0 mm	XPR18-033017
50 x 3.0 mm	XPR18-053017
100 x 3.0 mm	XPR18-103017
150 x 3.0 mm	XPR18-153017

Particle Size: 2.5 µm	
Size	Part No
30x 2.1 mm	XPR18-032125
50x 2.1 mm	XPR18-052125
100x 2.1 mm	XPR18-102125
150x 2.1 mm	XPR18-152125
30 x 3.0 mm	XPR18-033025
50 x 3.0 mm	XPR18-053025
100 x 3.0 mm	XPR18-103025
150 x 3.0 mm	XPR18-153025
250 x 3.0 mm	XPR18-253025
30 x 4.6 mm	XPR18-034625
50 x 4.6 mm	XPR18-054625
100 x 4.6 mm	XPR18-104625
150 x 4.6 mm	XPR18-154625
200 x 4.6 mm	XPR18-204625
250 x 4.6 mm	XPR18-254625

Particle Size: 3 µm	
Size	Part No
30x 2.1 mm	XPR18-032130
50x 2.1 mm	XPR18-052130
100x 2.1 mm	XPR18-102130
150 x 2.1 mm	XPR18-152130
30 x 3.0 mm	XPR18-033030
50 x 3.0 mm	XPR18-053030
100 x 3.0 mm	XPR18-103030
150 x 3.0 mm	XPR18-153030
250 x 3.0 mm	XPR18-253030
30 x 4.6 mm	XPR18-034630
50 x 4.6 mm	XPR18-054630
100 x 4.6 mm	XPR18-104630
150 x 4.6 mm	XPR18-154630
200 x 4.6 mm	XPR18-204630
250 x 4.6 mm	XPR18-254630

Particle Size: 3.5 µm	
Size	Part No
30x 2.1 mm	XPR18-032135
50x 2.1 mm	XPR18-052135
100x 2.1 mm	XPR18-102135
150 x 2.1 mm	XPR18-152135
30 x 3.0 mm	XPR18-033035
50 x 3.0 mm	XPR18-053035
100 x 3.0 mm	XPR18-103035
150 x 3.0 mm	XPR18-153035
250 x 3.0 mm	XPR18-253035
30 x 4.6 mm	XPR18-034635
50 x 4.6 mm	XPR18-054635
100 x 4.6 mm	XPR18-104635
150 x 4.6 mm	XPR18-154635
200 x 4.6 mm	XPR18-204635
250 x 4.6 mm	XPR18-254635

Particle Size: 5 µm	
Size	Part No
30x 2.1 mm	XPR18-032150
50x 2.1 mm	XPR18-052150
100x 2.1 mm	XPR18-102150
150 x 2.1 mm	XPR18-152150
30 x 3.0 mm	XPR18-033050
50 x 3.0 mm	XPR18-053050
100 x 3.0 mm	XPR18-103050
150 x 3.0 mm	XPR18-153050
250 x 3.0 mm	XPR18-253050
30 x 4.6 mm	XPR18-034650
50 x 4.6 mm	XPR18-054650
100 x 4.6 mm	XPR18-104650
150 x 4.6 mm	XPR18-154650
200 x 4.6 mm	XPR18-204650
250 x 4.6 mm	XPR18-254650

Particle Size: 5 µm	
Size	Part No
150 x 10 mm	XPR18-1510050
250 x 10 mm	XPR18-2510050
150 x 20 mm	XPR18-1520050
250 x 20 mm	XPR18-2520050
150 x 21.2 mm	XPR18-1521250
250 x 21.2 mm	XPR18-2521250
150 x 30 mm	XPR18-1530050
250 x 30 mm	XPR18-2530050
150 x 50 mm	XPR18-1550050
250 x 50 mm	XPR18-2550050

Particle Size: 10 µm	
Size	Part No
150 x 10 mm	XPR18-15100100
250 x 10 mm	XPR18-25100100
150 x 20 mm	XPR18-15200100
250 x 20 mm	XPR18-25200100
150 x 21.2 mm	XPR18-15212100
250 x 21.2 mm	XPR18-25212100
150 x 30 mm	XPR18-15300100
250 x 30 mm	XPR18-25300100
150 x 50 mm	XPR18-15500100
250 x 50 mm	XPR18-25500100

MicroPulite® XP RP18 Plus Column

With the polar embedded group in the bonded phase, XP RP18Plus is compatible and tolerant of 100% aqueous phases and is stable in the pH 2-12 range. The polar embedded group also has a shielding of the silanol group on the silica, thus the column provide good peak shape for basic compounds, and XP RP18Plus selectivity is also different from XP tC18.

Stationary Phase	Bonded Phase	Carbon Load	Surface area	End-capped	Pore Size	Particle Size	USP Classification	pH range	Temperature limit
RP18 Plus	 17%	185	Yes	130Å	1.7,2.5,3,3.5,5,7, 10µm	L1	2-11	50°C (Low pH) 45°C (High pH)	

◆ Application Cases

Determination of 5-hydroxymethylfurfural in Tinidazole Dextrose Injection

Column: MicroPulite® XP RP18 Plus 4.6*250mm 5µm (Part No: XPR18P-254650)

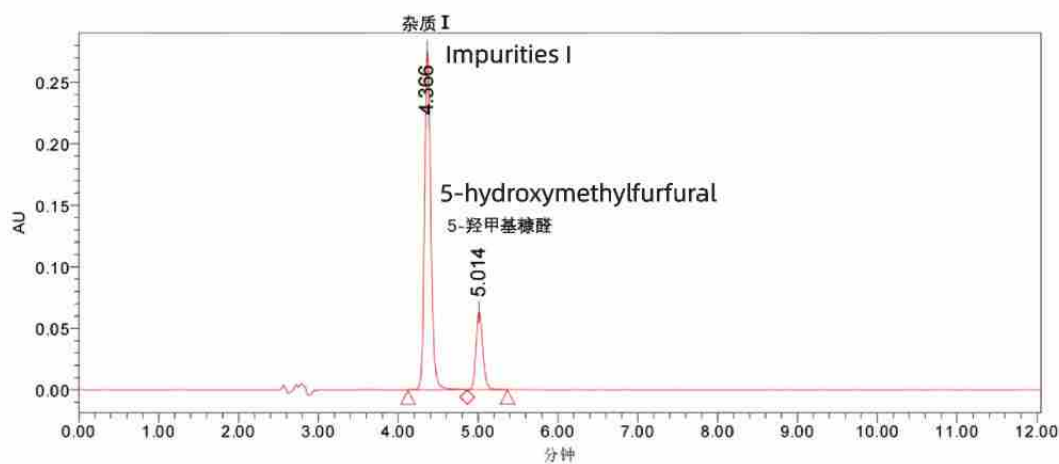
Wavelength: UV 284nm

Flow rate: 1mL/min

Column temperature: 30°C

Mobile phase: 50mM Potassium dihydrogen phosphate (pH adjusted to 3.5 with phosphoric acid)-methanol = (80: 20)

Chromatogram:



MicroPulite® XP RP18 Plus Ordering Information

Particle Size: 1.7 µm	
Size	Part No
30x 2.1 mm	XPR18P-032117
50x 2.1 mm	XPR18P-052117
100x 2.1 mm	XPR18P-102117
150 x 2.1 mm	XPR18P-152117
30 x 3.0 mm	XPR18P-033017
50 x 3.0 mm	XPR18P-053017
100 x 3.0 mm	XPR18P-103017
150 x 3.0 mm	XPR18P-153017

Particle Size: 2.5 µm	
Size	Part No
30x 2.1 mm	XPR18P-032125
50x 2.1 mm	XPR18P-052125
100x 2.1 mm	XPR18P-102125
150 x 2.1 mm	XPR18P-152125
30 x 3.0 mm	XPR18P-033025
50 x 3.0 mm	XPR18P-053025
100 x 3.0 mm	XPR18P-103025
150 x 3.0 mm	XPR18P-153025
250 x 3.0 mm	XPR18P-253025
30 x 4.6 mm	XPR18P-034625
50 x 4.6 mm	XPR18P-054625
100 x 4.6 mm	XPR18P-104625
150 x 4.6 mm	XPR18P-154625
200 x 4.6 mm	XPR18P-204625
250 x 4.6 mm	XPR18P-254625

Particle Size: 3 µm	
Size	Part No
30x 2.1 mm	XPR18P-032130
50x 2.1 mm	XPR18P-052130
100x 2.1 mm	XPR18P-102130
150 x 2.1 mm	XPR18P-152130
30 x 3.0 mm	XPR18P-033030
50 x 3.0 mm	XPR18P-053030
100 x 3.0 mm	XPR18P-103030
150 x 3.0 mm	XPR18P-153030
250 x 3.0 mm	XPR18P-253030
30 x 4.6 mm	XPR18P-034630
50 x 4.6 mm	XPR18P-054630
100 x 4.6 mm	XPR18P-104630
150 x 4.6 mm	XPR18P-154630
200 x 4.6 mm	XPR18P-204630
250 x 4.6 mm	XPR18P-254630

Particle Size: 3.5 µm	
Size	Part No
30x 2.1 mm	XPR18P-032135
50x 2.1 mm	XPR18P-052135
100x 2.1 mm	XPR18P-102135
150 x 2.1 mm	XPR18P-152135
30 x 3.0 mm	XPR18P-033035
50 x 3.0 mm	XPR18P-053035
100 x 3.0 mm	XPR18P-103035
150 x 3.0 mm	XPR18P-153035
250 x 3.0 mm	XPR18P-253035
30 x 4.6 mm	XPR18P-034635
50 x 4.6 mm	XPR18P-054635
100 x 4.6 mm	XPR18P-104635
150 x 4.6 mm	XPR18P-154635
200 x 4.6 mm	XPR18P-204635
250 x 4.6 mm	XPR18P-254635

Particle Size: 5 µm	
Size	Part No
30x 2.1 mm	XPR18P-032150
50x 2.1 mm	XPR18P-052150
100x 2.1 mm	XPR18P-102150
150 x 2.1 mm	XPR18P-152150
30 x 3.0 mm	XPR18P-033050
50 x 3.0 mm	XPR18P-053050
100 x 3.0 mm	XPR18P-103050
150 x 3.0 mm	XPR18P-153050
250 x 3.0 mm	XPR18P-253050
30 x 4.6 mm	XPR18P-034650
50 x 4.6 mm	XPR18P-054650
100 x 4.6 mm	XPR18P-104650
150 x 4.6 mm	XPR18P-154650
200 x 4.6 mm	XPR18P-204650
250 x 4.6 mm	XPR18P-254650

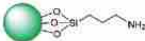
Particle Size: 5 µm	
Size	Part No
150 x 10 mm	XPR18P-1510050
250 x 10 mm	XPR18P-2510050
150 x 20 mm	XPR18P-1520050
250 x 20 mm	XPR18P-2520050
150 x 21.2 mm	XPR18P-1521250
250 x 21.2 mm	XPR18P-2521250
150 x 30 mm	XPR18P-1530050
250 x 30 mm	XPR18P-2530050
150 x 50 mm	XPR18P-1550050
250 x 50 mm	XPR18P-2550050

Particle Size: 7 µm	
Size	Part No
150 x 10 mm	XPR18P-1510070
250 x 10 mm	XPR18P-2510070
150 x 20 mm	XPR18P-1520070
250 x 20 mm	XPR18P-2520070
150 x 21.2 mm	XPR18P-1521270
250 x 21.2 mm	XPR18P-2521270
150 x 30 mm	XPR18P-1530070
250 x 30 mm	XPR18P-2530070
150 x 50 mm	XPR18P-1550070
250 x 50 mm	XPR18P-2550070

Particle Size: 10 µm	
Size	Part No
150 x 10 mm	XPR18P-15100100
250 x 10 mm	XPR18P-25100100
150 x 20 mm	XPR18P-15200100
250 x 20 mm	XPR18P-25200100
150 x 21.2 mm	XPR18P-15212100
250 x 21.2 mm	XPR18P-25212100
150 x 30 mm	XPR18P-15300100
250 x 30 mm	XPR18P-25300100
150 x 50 mm	XPR18P-15500100
250 x 50 mm	XPR18P-25500100

MicroPulite® XP NH₂ Column

How to extend the amido columns life is a major challenge, because the amido easily fall off from the silica surface. XP NH₂ adopt hybrid silica and triple bonded technology, can use in pH 1-9 and has a longer column life .The column can be used in both normal phase and HILIC modes of action, and is suitable for the analysis of compounds such as saccharides, steroids and other compounds.

Stationary Phase	Bonded Phase	Carbon Load	Surface area	End-capped	Pore Size	Particle Size	USP Classification	pH range	Temperature limit
NH ₂		9%	185	No	130Å	3.5, 5µm	L8	1-9	45°C (Low pH) 45°C (High pH)

◆Application Cases

Determination of Glucosamine Sulfate Content in Capsules

Column: MicroPulite® XP NH₂ 5µm 250*4.6mm

Wavelength: UV 195nm

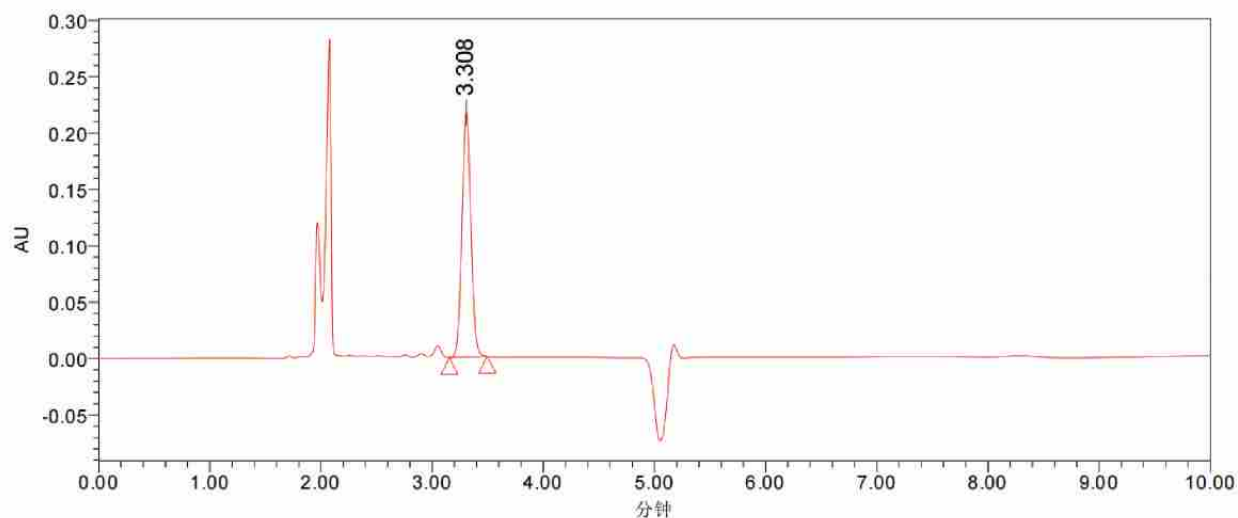
Flow rate: 1.5mL/min

Column temperature: 35°C

Mobile phase: 20 mM Potassium Dihydrogen Phosphate Solution (pH adjusted to 7.5 with phosphoric acid)

- Acetonitrile (35:65)

Chromatogram:



MicorPulite® XP NH₂ Ordering Information

Particle Size: 3.5 µm		Particle Size: 5 µm	
Size	Part No	Size	Part No
30x 2.1 mm	XPNH-032135	30x 2.1 mm	XPNH-032150
50x 2.1 mm	XPNH-052135	50x 2.1 mm	XPNH-052150
100x 2.1 mm	XPNH-102135	100x 2.1 mm	XPNH-102150
150 x 2.1 mm	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
200 x 4.6 mm	XPNH-204635	200 x 4.6 mm	XPNH-204650
250 x 4.6 mm	XPNH-254635	250 x 4.6 mm	XPNH-254650

MicroPulite® XP T3 Column

XP T3 use triple bonded technology, is compatible and tolerant of 100% aqueous phase and stable in pH 1-12. XP T3 can enhance the retention of polar compounds, at the same time it has longer column life as hybrid silica column.

Stationary Phase	Bonded Phase	Carbon Load	Surface area	End-capped	Pore Size	Particle Size	USP Classification	pH range	Temperature limit
T3		14%	185	Yes	130Å	3.5, 5, 10µm	L1	1-12	80°C (Low pH) 60°C (High pH)

◆ Application Cases

Detection of water soluble vitamins

Column: MicroPulite® XP T3 250*4.6mm 5µm(Part No: XPT3-254650)

Wavelength: UV 265nm

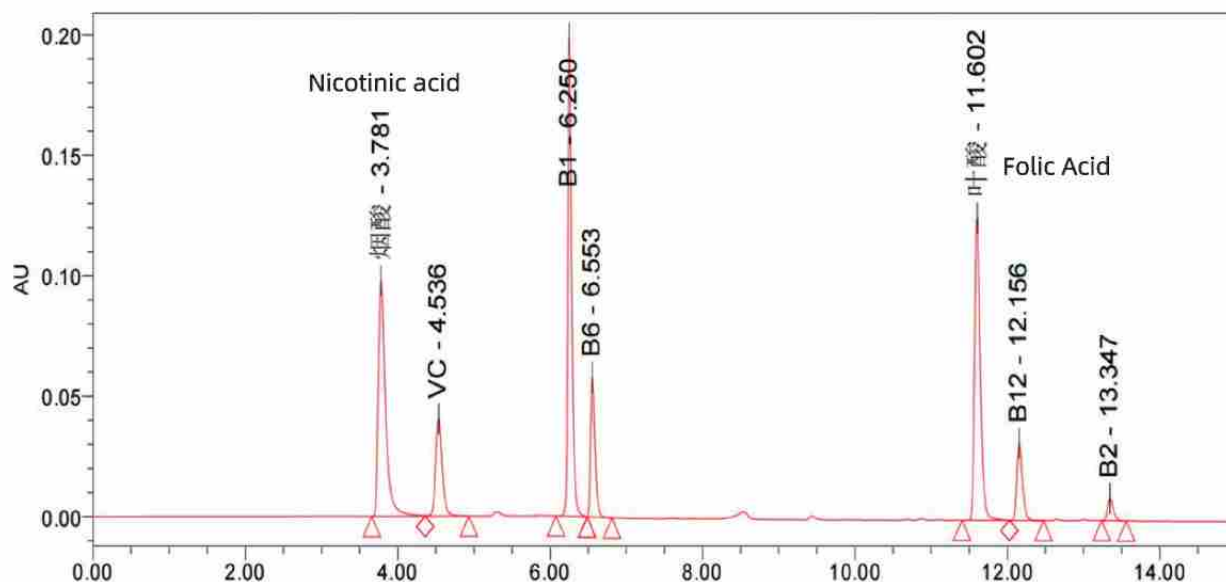
Flow rate: 1.0mL/min

Column temperature: 30°C

Mobile phase: Phase A: 20 mM ammonium formate (pH 3.0); Phase B: acetonitrile

t(min)	A%	B%
0	100	0
15	70	30

Chromatogram:



MicorPulite® XP T3 Ordering Information

Particle Size: 3.5 µm	
Size	Part No
30x 2.1 mm	XPT3-032135
50x 2.1 mm	XPT3-052135
100x 2.1 mm	XPT3-102135
150x 2.1 mm	XPT3-152135
30x 3.0 mm	XPT3-033035
50x 3.0 mm	XPT3-053035
100x 3.0 mm	XPT3-103035
150x 3.0 mm	XPT3-153035
250x 3.0 mm	XPT3-253035
30x 4.6 mm	XPT3-034635
50x 4.6 mm	XPT3-054635
100x 4.6 mm	XPT3-104635
150x 4.6 mm	XPT3-154635
200x 4.6 mm	XPT3-204635
250x 4.6 mm	XPT3-254635

Particle Size: 5 µm	
Size	Part No
30x 2.1 mm	XPT3-032150
50x 2.1 mm	XPT3-052150
100x 2.1 mm	XPT3-102150
150x 2.1 mm	XPT3-152150
30x 3.0 mm	XPT3-033050
50x 3.0 mm	XPT3-053050
100x 3.0 mm	XPT3-103050
150x 3.0 mm	XPT3-153050
250x 3.0 mm	XPT3-253050
30x 4.6 mm	XPT3-034650
50x 4.6 mm	XPT3-054650
100x 4.6 mm	XPT3-104650
150x 4.6 mm	XPT3-154650
200x 4.6 mm	XPT3-204650
250x 4.6 mm	XPT3-254650

Particle Size: 5 µm	
Size	Part No
150x 10 mm	XPT3-1510050
250x 10 mm	XPT3-2510050
150x 20 mm	XPT3-1520050
250x 20 mm	XPT3-2520050
150x 21.2 mm	XPT3-1521250
250x 21.2 mm	XPT3-2521250
150x 30 mm	XPT3-1530050
250x 30 mm	XPT3-2530050
150x 50 mm	XPT3-1550050
250x 50 mm	XPT3-2550050

Particle Size: 7 µm	
Size	Part No
150x 10 mm	XPT3-1510070
250x 10 mm	XPT3-2510070
150x 20 mm	XPT3-1520070
250x 20 mm	XPT3-2520070
150x 21.2 mm	XPT3-1521270
250x 21.2 mm	XPT3-2521270
150x 30 mm	XPT3-1530070
250x 30 mm	XPT3-2530070
150x 50 mm	XPT3-1550070
250x 50 mm	XPT3-2550070

Particle Size: 10 µm	
Size	Part No
150x 10 mm	XPT3-15100100
250x 10 mm	XPT3-25100100
150x 20 mm	XPT3-15200100
250x 20 mm	XPT3-25200100
150x 21.2 mm	XPT3-15212100
250x 21.2 mm	XPT3-25212100
150x 30 mm	XPT3-15300100
250x 30 mm	XPT3-25300100
150x 50 mm	XPT3-15500100
250x 50 mm	XPT3-25500100

MicroPulite® XP Phenyl-Hexyl Column

XP Phenyl-Hexyl is a triple bonded phenyl column with phenyl-hexyl group bonded to hybrid silica. Compared with phenyl bonded to silica, it has a wider pH tolerance range (pH 1-12) and better chemical stability of the bonded phase. It provides different selectivity from straight-chain alkane columns such as C18 or C8, and is suitable for the analysis of aromatic compounds and amines.

Stationary Phase	Bonded Phase	Carbon Load	Surface area	End-capped	Pore Size	Particle Size	USP Classification	pH range	Temperature limit
Phenyl-Hexyl		15%	185	Yes	130Å	1.7,2.5,3,3.5, 5,7,10µm	L11	1-12	80°C (Low pH) 60°C (High pH)

◆ Application Cases

Separation of phenylserine from related impurities

Column: MicroPulite® XP Phenyl-Hexyl 5µm 250*4.6mm

Wavelength: UV 230nm

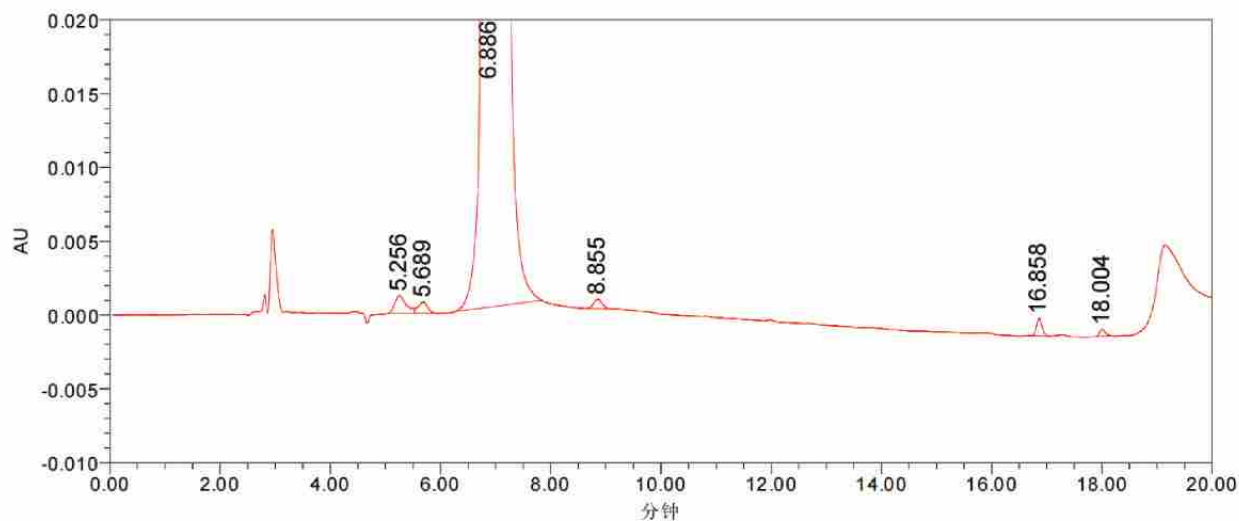
Flow rate: 1.0mL/min

Column temperature: 30°C

Mobile phase: A: 20 mM Disodium Hydrogen Phosphate Solution (pH adjusted to 10 with Sodium Hydroxide); B: Methanol

gradient elution: 0min:2%B; 5min:2%B; 15min:35%B; 15.1min:2%B; 20min:2%B

Chromatogram:



MicroPulite® XP Phenyl-Hexyl Ordering Information

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

Particle Size: 2.5 µm	
Size	Part No
30x 2.1 mm	XPPH-032125
50x 2.1 mm	XPPH-052125
100x 2.1 mm	XPPH-102125
150 x 2.1 mm	XPPH-152125
30 x 3.0 mm	XPPH-033025
50 x 3.0 mm	XPPH-053025
100 x 3.0 mm	XPPH-103025
150 x 3.0 mm	XPPH-153025
250 x 3.0 mm	XPPH-253025
30 x 4.6 mm	XPPH-034625
50 x 4.6 mm	XPPH-054625
100 x 4.6 mm	XPPH-104625
150 x 4.6 mm	XPPH-154625
200 x 4.6 mm	XPPH-204625
250 x 4.6 mm	XPPH-254625

Particle Size: 3 µm	
Size	Part No
30x 2.1 mm	XPPH-032130
50x 2.1 mm	XPPH-052130
100x 2.1 mm	XPPH-102130
150 x 2.1 mm	XPPH-152130
30 x 3.0 mm	XPPH-033030
50 x 3.0 mm	XPPH-053030
100 x 3.0 mm	XPPH-103030
150 x 3.0 mm	XPPH-153030
250 x 3.0 mm	XPPH-253030
30 x 4.6 mm	XPPH-034630
50 x 4.6 mm	XPPH-054630
100 x 4.6 mm	XPPH-104630
150 x 4.6 mm	XPPH-154630
200 x 4.6 mm	XPPH-204630
250 x 4.6 mm	XPPH-254630

Particle Size: 3.5 µm	
Size	Part No
30x 2.1 mm	XPPH-032135
50x 2.1 mm	XPPH-052135
100x 2.1 mm	XPPH-102135
150 x 2.1 mm	XPPH-152135
30 x 3.0 mm	XPPH-033035
50 x 3.0 mm	XPPH-053035
100 x 3.0 mm	XPPH-103035
150 x 3.0 mm	XPPH-153035
250 x 3.0 mm	XPPH-253035
30 x 4.6 mm	XPPH-034635
50 x 4.6 mm	XPPH-054635
100 x 4.6 mm	XPPH-104635
150 x 4.6 mm	XPPH-154635
200 x 4.6 mm	XPPH-204635
250 x 4.6 mm	XPPH-254635

Particle Size: 5 µm	
Size	Part No
30x 2.1 mm	XPPH-032150
50x 2.1 mm	XPPH-052150
100x 2.1 mm	XPPH-102150
150 x 2.1 mm	XPPH-152150
30 x 3.0 mm	XPPH-033050
50 x 3.0 mm	XPPH-053050
100 x 3.0 mm	XPPH-103050
150 x 3.0 mm	XPPH-153050
250 x 3.0 mm	XPPH-253050
30 x 4.6 mm	XPPH-034650
50 x 4.6 mm	XPPH-054650
100 x 4.6 mm	XPPH-104650
150 x 4.6 mm	XPPH-154650
200 x 4.6 mm	XPPH-204650
250 x 4.6 mm	XPPH-254650

Particle Size: 5 µm	
Size	Part No
150 x 10 mm	XPPH-1510050
250 x 10 mm	XPPH-2510050
150 x 20 mm	XPPH-1520050
250 x 20 mm	XPPH-2520050
150 x 21.2 mm	XPPH-1521250
250 x 21.2 mm	XPPH-2521250
150 x 30 mm	XPPH-1530050
250 x 30 mm	XPPH-2530050
150 x 50 mm	XPPH-1550050
250 x 50 mm	XPPH-2550050

Particle Size: 7 µm	
Size	Part No
150 x 10 mm	XPPH-1510070
250 x 10 mm	XPPH-2510070
150 x 20 mm	XPPH-1520070
250 x 20 mm	XPPH-2520070
150 x 21.2 mm	XPPH-1521270
250 x 21.2 mm	XPPH-2521270
150 x 30 mm	XPPH-1530070
250 x 30 mm	XPPH-2530070
150 x 50 mm	XPPH-1550070
250 x 50 mm	XPPH-2550070

Particle Size: 10 µm	
Size	Part No
150 x 10 mm	XPPH-15100100
250 x 10 mm	XPPH-25100100
150 x 20 mm	XPPH-15200100
250 x 20 mm	XPPH-25200100
150 x 21.2 mm	XPPH-15212100
250 x 21.2 mm	XPPH-25212100
150 x 30 mm	XPPH-15300100
250 x 30 mm	XPPH-25300100
150 x 50 mm	XPPH-15500100
250 x 50 mm	XPPH-25500100

MicroPulite® XP Amide Column

XP Amide can separate and analysis strong polar compounds in HILIC mode, which are not retained by C18 . Based on hybrid particles,XP Amide can be used with a wider range of pH mobile phases (pH 2-11) to meet the needs for separation of strongly polar compounds such as acid, basic, and neutral.

Stationary Phase	Bonded Phase	Carbon Load	Surface area	End-capped	Pore Size	Particle Size	USP Classification	pH range	Temperature limit
Amide		12%	185	NO	130Å	1.7,2.5,3 3.5,5,7,10µm	L68	2-11	90°C (Low pH) 90°C (High pH)

◆ Application Cases

Analysis of saccharide Compounds

Column: MicroPulite® XP Amide 4.6*150mm 3.5µm(Part No: XPA-154635)

Wavelength: ELSD

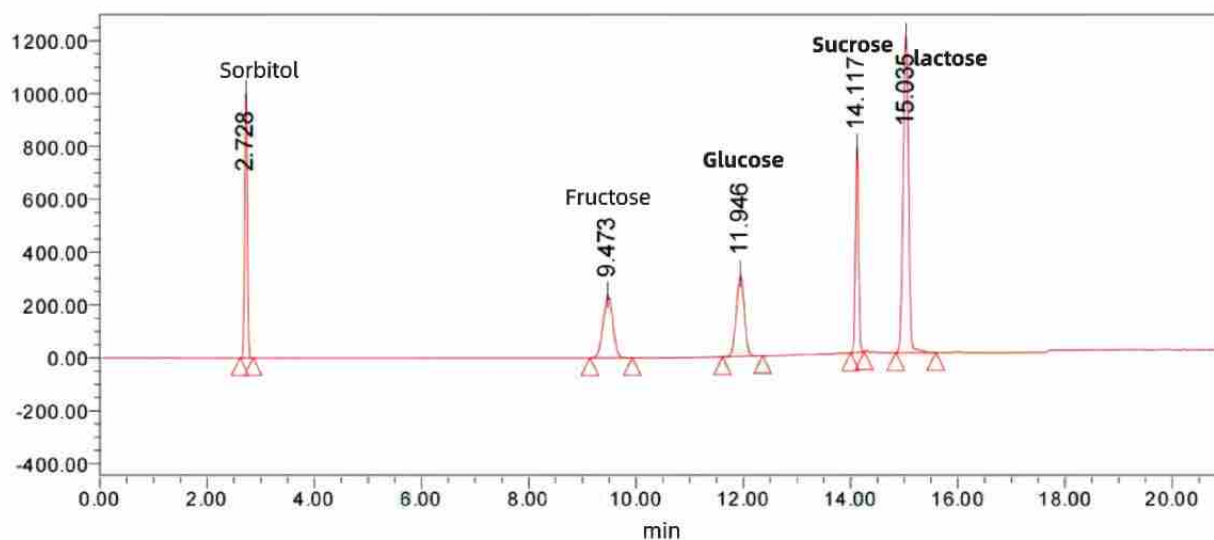
Flow rate: 1mL/min

Column temperature: 50°C

Mobile phase: Phase A: 0.2% TEA waters; Phase B: acetonitrile

Time	A%	B%
0	10	90
6	10	90
11	30	70
20	30	70
21	10	90

Chromatogram:



◆Application Cases

Detection of Five Types of Sugars

Column: MicroPulite® XP Amide 3.5µm 250*4.6mm

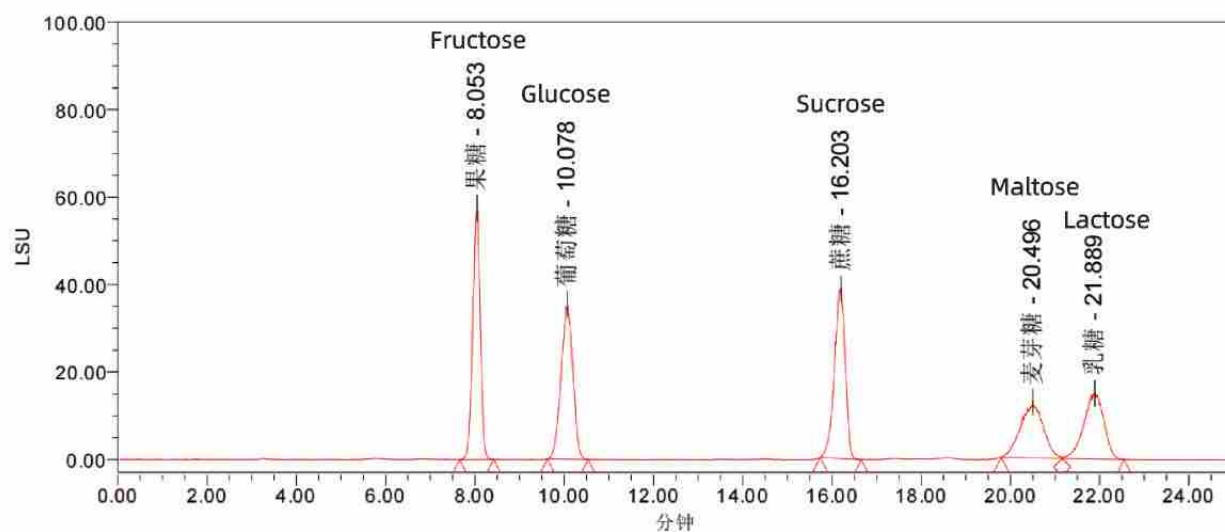
Detector: Evaporative Light Scattering Detector (ELSD)

Flow rate: 1.0mL/min

Column temperature: 50°C

Mobile phase: Acetonitrile-50 mM Ammonium Acetate (containing 0.5% Triethylamine) (80:20)

Chromatogram:



Separation of Myo-Inositol (MI) and D-Chiro-Inositol (DCI)

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

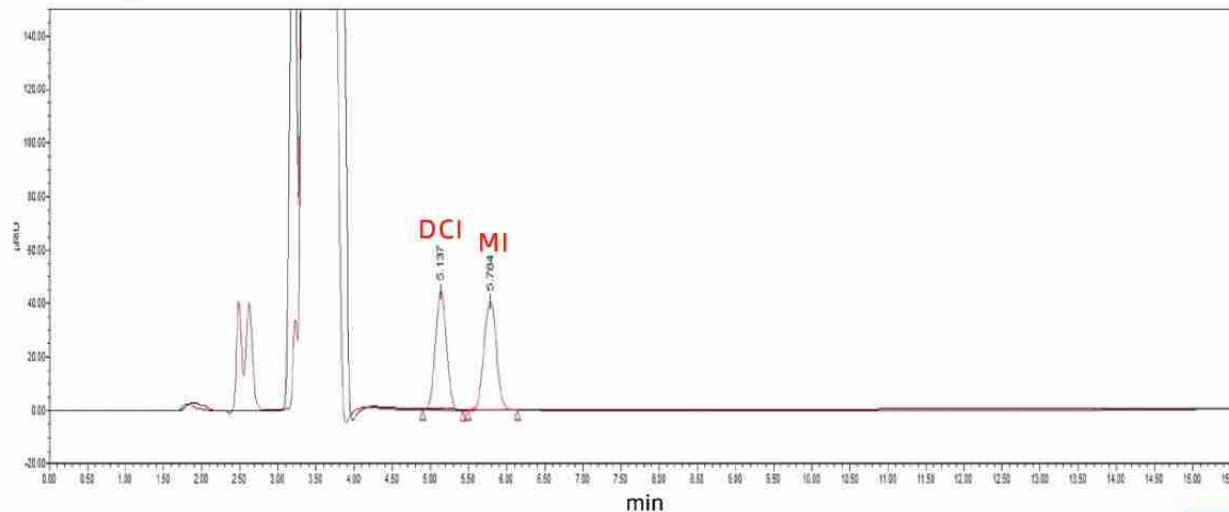
Wavelength: Differential Refractometer Detector

Flow rate: 1.0mL/min

Column temperature: 40°C

Mobile phase: Methanol-0.1% Ammonia Solution= (90:10)

Chromatogram:



MicroPulite® XP Amide Ordering Information

Particle Size: 1.7 µm	
Size	Part No
30x 2.1 mm	XPA-032117
50x 2.1 mm	XPA-052117
100x 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	Part No
30x 2.1 mm	XPA-032125
50x 2.1 mm	XPA-052125
100x 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
200 x 4.6 mm	XPA-204625
250 x 4.6 mm	XPA-254625

Particle Size: 3 µm	
Size	Part No
30x 2.1 mm	XPA-032130
50x 2.1 mm	XPA-052130
100x 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
200 x 4.6 mm	XPA-204630
250 x 4.6 mm	XPA-254630

Particle Size: 3.5 µm	
Size	Part No
30x 2.1 mm	XPA-032135
50x 2.1 mm	XPA-052135
100x 2.1 mm	XPA-102135
150 x 2.1 mm	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
200 x 4.6 mm	XPA-204635
250 x 4.6 mm	XPA-254635

Particle Size: 5 µm	
Size	Part No
30x 2.1 mm	XPA-032150
50x 2.1 mm	XPA-052150
100x 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
200 x 4.6 mm	XPA-204650
250 x 4.6 mm	XPA-254650

Particle Size: 5 µm	
Size	Part No
150 x 10 mm	XPA-1510050
250 x 10 mm	XPA-2510050
150 x 20 mm	XPA-1520050
250 x 20 mm	XPA-2520050
150 x 21.2 mm	XPA-1521250
250 x 21.2 mm	XPA-2521250
150 x 30 mm	XPA-1530050
250 x 30 mm	XPA-2530050
150 x 50 mm	XPA-1550050
250 x 50 mm	XPA-2550050

Particle Size: 7 µm	
Size	Part No
150 x 10 mm	XPA-1510070
250 x 10 mm	XPA-2510070
150 x 20 mm	XPA-1520070
250 x 20 mm	XPA-2520070
150 x 21.2 mm	XPA-1521270
250 x 21.2 mm	XPA-2521270
150 x 30 mm	XPA-1530070
250 x 30 mm	XPA-2530070
150 x 50 mm	XPA-1550070
250 x 50 mm	XPA-2550070

Particle Size: 10 µm	
Size	Part No
150 x 10 mm	XPA-15100100
250 x 10 mm	XPA-25100100
150 x 20 mm	XPA-15200100
250 x 20 mm	XPA-25200100
150 x 21.2 mm	XPA-15212100
250 x 21.2 mm	XPA-25212100
150 x 30 mm	XPA-15300100
250 x 30 mm	XPA-25300100
150 x 50 mm	XPA-15500100
250 x 50 mm	XPA-25500100

MicroPulite® XP HILIC Column

As unbonded hybrid silica, XP HILIC has excellent chemical stability in the pH 1-9 for use in normal phase and HILIC conditions. XP HILIC can increase the retention of polar compounds in HILIC mode, especially polar basic and neutral compounds.

Stationary Phase	Bonded Phase	Carbon Load	Surface area	End-capped	Pore Size	Particle Size	USP Classification	pH range	Temperature limit
HILIC		-	185	NO	130Å	1.7,2.5,3 3.5,5,7,10µm	L3	1-9	45°C (Low pH) 45°C (High pH)

◆ Application Cases

Determination of Cyromazine Residues in Animal derived Foods

Method: GB 31658 12-2021

Column: MicroPulite® XP HILIC 2.1*150mm 3.5µm (Part No: XPH-152135)

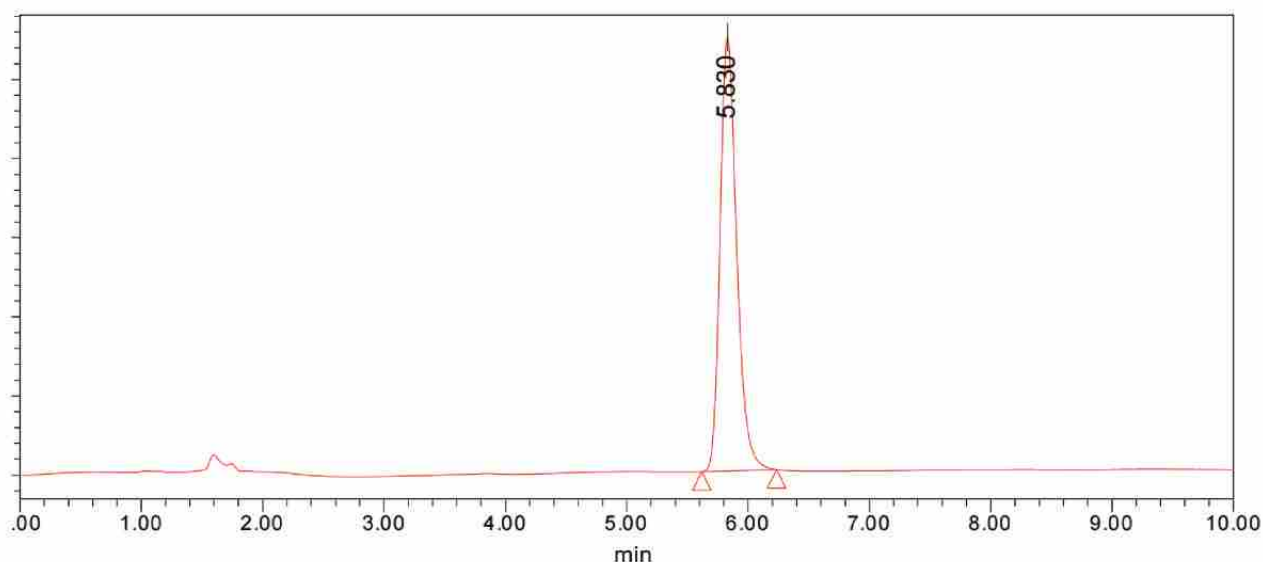
Wavelength: UV 214nm

Flow rate: 0.3mL/min

Column temperature: 30°C

Mobile phase: Acetonitrile - 25mM ammonium acetate= (96 : 4)

Chromatogram:



MicroPulite® XP HILIC Ordering Information

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

Particle Size: 2.5 µm	
Size	Part No
30x 2.1 mm	XPB-032125
50x 2.1 mm	XPB-052125
100x 2.1 mm	XPB-102125
150 x 2.1 mm	XPB-152125
30 x 3.0 mm	XPB-033025
50 x 3.0 mm	XPB-053025
100 x 3.0 mm	XPB-103025
150 x 3.0 mm	XPB-153025
250 x 3.0 mm	XPB-253025
30 x 4.6 mm	XPB-034625
50 x 4.6 mm	XPB-054625
100 x 4.6 mm	XPB-104625
150 x 4.6 mm	XPB-154625
200 x 4.6 mm	XPB-204625
250 x 4.6 mm	XPB-254625

Particle Size: 3 µm	
Size	Part No
30x 2.1 mm	XPB-032130
50x 2.1 mm	XPB-052130
100x 2.1 mm	XPB-102130
150 x 2.1 mm	XPB-152130
30 x 3.0 mm	XPB-033030
50 x 3.0 mm	XPB-053030
100 x 3.0 mm	XPB-103030
150 x 3.0 mm	XPB-153030
250 x 3.0 mm	XPB-253030
30 x 4.6 mm	XPB-034630
50 x 4.6 mm	XPB-054630
100 x 4.6 mm	XPB-104630
150 x 4.6 mm	XPB-154630
200 x 4.6 mm	XPB-204630
250 x 4.6 mm	XPB-254630

Particle Size: 3.5 µm	
Size	Part No
30x 2.1 mm	XPB-032135
50x 2.1 mm	XPB-052135
100x 2.1 mm	XPB-102135
150 x 2.1 mm	XPB-152135
30 x 3.0 mm	XPB-033035
50 x 3.0 mm	XPB-053035
100 x 3.0 mm	XPB-103035
150 x 3.0 mm	XPB-153035
250 x 3.0 mm	XPB-253035
30 x 4.6 mm	XPB-034635
50 x 4.6 mm	XPB-054635
100 x 4.6 mm	XPB-104635
150 x 4.6 mm	XPB-154635
200 x 4.6 mm	XPB-204635
250 x 4.6 mm	XPB-254635

Particle Size: 5 µm	
Size	Part No
30x 2.1 mm	XPB-032150
50x 2.1 mm	XPB-052150
100x 2.1 mm	XPB-102150
150 x 2.1 mm	XPB-152150
30 x 3.0 mm	XPB-033050
50 x 3.0 mm	XPB-053050
100 x 3.0 mm	XPB-103050
150 x 3.0 mm	XPB-153050
250 x 3.0 mm	XPB-253050
30 x 4.6 mm	XPB-034650
50 x 4.6 mm	XPB-054650
100 x 4.6 mm	XPB-104650
150 x 4.6 mm	XPB-154650
200 x 4.6 mm	XPB-204650
250 x 4.6 mm	XPB-254650

Particle Size: 5 µm	
Size	Part No
150 x 10 mm	XPB-1510050
250 x 10 mm	XPB-2510050
150 x 20 mm	XPB-1520050
250 x 20 mm	XPB-2520050
150 x 21.2 mm	XPB-1521250
250 x 21.2 mm	XPB-2521250
150 x 30 mm	XPB-1530050
250 x 30 mm	XPB-2530050
150 x 50 mm	XPB-1550050
250 x 50 mm	XPB-2550050

Particle Size: 7 µm	
Size	Part No
150 x 10 mm	XPB-1510070
250 x 10 mm	XPB-2510070
150 x 20 mm	XPB-1520070
250 x 20 mm	XPB-2520070
150 x 21.2 mm	XPB-1521270
250 x 21.2 mm	XPB-2521270
150 x 30 mm	XPB-1530070
250 x 30 mm	XPB-2530070
150 x 50 mm	XPB-1550070
250 x 50 mm	XPB-2550070

Particle Size: 10 µm	
Size	Part No
150 x 10 mm	XPB-15100100
250 x 10 mm	XPB-25100100
150 x 20 mm	XPB-15200100
250 x 20 mm	XPB-25200100
150 x 21.2 mm	XPB-15212100
250 x 21.2 mm	XPB-25212100
150 x 30 mm	XPB-15300100
250 x 30 mm	XPB-25300100
150 x 50 mm	XPB-15500100
250 x 50 mm	XPB-25500100

MicroPulite® XP Oligo tC18 Column

Hybrid silica particle has good tolerance to high temperature, high pH, and high salt. Reverse phase analysis Oligonucleotides requires ion pair reagent ,pH higher than 7 and high temperature , XP Oligo tC18 can meet these strict conditions, and is the good choice for reverse phase columns for oligonucleotide analysis.

Stationary Phase	Bonded Phase	Carbon Load	Surface area	End-capped	Pore Size	Particle Size	USP Classification	pH range	Temperature limit
Oligo tC18		18%	185	Yes	130Å	1.7,2.5,3 3.5,5,7,10µm	L1	1-12	80°C (Low pH) 60°C (High pH)

MicroPulite® XP Oligo tC18 Ordering Information

Particle Size: 1.7 µm		Particle Size: 2.5 µm		Particle Size: 3 µm	
Size	Part No	Size	Part No	Size	Part No
30x 2.1 mm	XPOTC18-032117	30x 2.1 mm	XPOTC18-032125	30x 2.1 mm	XPOTC18-032130
50x 2.1 mm	XPOTC18-052117	50x 2.1 mm	XPOTC18-052125	50x 2.1 mm	XPOTC18-052130
100x 2.1 mm	XPOTC18-102117	100x 2.1 mm	XPOTC18-102125	100x 2.1 mm	XPOTC18-102130
150 x 2.1 mm	XPOTC18-152117	150 x 2.1 mm	XPOTC18-152125	150 x 2.1 mm	XPOTC18-152130
30 x 3.0 mm	XPOTC18-033017	30 x 3.0 mm	XPOTC18-033025	30 x 3.0 mm	XPOTC18-033030
50 x 3.0 mm	XPOTC18-053017	50 x 3.0 mm	XPOTC18-053025	50 x 3.0 mm	XPOTC18-053030
100 x 3.0 mm	XPOTC18-103017	100 x 3.0 mm	XPOTC18-103025	100 x 3.0 mm	XPOTC18-103030
150 x 3.0 mm	XPOTC18-153017	150 x 3.0 mm	XPOTC18-153025	150 x 3.0 mm	XPOTC18-153030
		250 x 3.0 mm	XPOTC18-253025	250 x 3.0 mm	XPOTC18-253030
		30 x 4.6 mm	XPOTC18-034625	30 x 4.6 mm	XPOTC18-034630
		50 x 4.6 mm	XPOTC18-054625	50 x 4.6 mm	XPOTC18-054630
		100 x 4.6 mm	XPOTC18-104625	100 x 4.6 mm	XPOTC18-104630
		150 x 4.6 mm	XPOTC18-154625	150 x 4.6 mm	XPOTC18-154630
		200 x 4.6 mm	XPOTC18-204625	200 x 4.6 mm	XPOTC18-204630
		250 x 4.6 mm	XPOTC18-254625	250 x 4.6 mm	XPOTC18-254630

Particle Size: 3.5 µm		Particle Size: 5 µm	
Size	Part No	Size	Part No
30x 2.1 mm	XPOTC18-032135	30x 2.1 mm	XPOTC18-032150
50x 2.1 mm	XPOTC18-052135	50x 2.1 mm	XPOTC18-052150
100x 2.1 mm	XPOTC18-102135	100x 2.1 mm	XPOTC18-102150
150 x 2.1 mm	XPOTC18-152135	150 x 2.1 mm	XPOTC18-152150
30 x 3.0 mm	XPOTC18-033035	30 x 3.0 mm	XPOTC18-033050
50 x 3.0 mm	XPOTC18-053035	50 x 3.0 mm	XPOTC18-053050
100 x 3.0 mm	XPOTC18-103035	100 x 3.0 mm	XPOTC18-103050
150 x 3.0 mm	XPOTC18-153035	150 x 3.0 mm	XPOTC18-153050
250 x 3.0 mm	XPOTC18-253035	250 x 3.0 mm	XPOTC18-253050
30 x 4.6 mm	XPOTC18-034635	30 x 4.6 mm	XPOTC18-034650
50 x 4.6 mm	XPOTC18-054635	50 x 4.6 mm	XPOTC18-054650
100 x 4.6 mm	XPOTC18-104635	100 x 4.6 mm	XPOTC18-104650
150 x 4.6 mm	XPOTC18-154635	150 x 4.6 mm	XPOTC18-154650
200 x 4.6 mm	XPOTC18-204635	200 x 4.6 mm	XPOTC18-204650
250 x 4.6 mm	XPOTC18-254635	250 x 4.6 mm	XPOTC18-254650

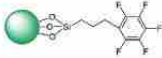
Particle Size: 5 μ m	
Size	Part No
150 x 10 mm	XPOTC18-1510050
250 x 10 mm	XPOTC18-2510050
150 x 20 mm	XPOTC18-1520050
250 x 20 mm	XPOTC18-2520050
150 x 21.2 mm	XPOTC18-1521250
250 x 21.2 mm	XPOTC18-2521250
150 x 30 mm	XPOTC18-1530050
250 x 30 mm	XPOTC18-2530050
150 x 50 mm	XPOTC18-1550050
250 x 50 mm	XPOTC18-2550050

Particle Size: 7 μ m	
Size	Part No
150 x 10 mm	XPOTC18-1510070
250 x 10 mm	XPOTC18-2510070
150 x 20 mm	XPOTC18-1520070
250 x 20 mm	XPOTC18-2520070
150 x 21.2 mm	XPOTC18-1521270
250 x 21.2 mm	XPOTC18-2521270
150 x 30 mm	XPOTC18-1530070
250 x 30 mm	XPOTC18-2530070
150 x 50 mm	XPOTC18-1550070
250 x 50 mm	XPOTC18-2550070

Particle Size: 10 μ m	
Size	Part No
150 x 10 mm	XPOTC18-1510070
250 x 10 mm	XPOTC18-2510070
150 x 20 mm	XPOTC18-1520070
250 x 20 mm	XPOTC18-2520070
150 x 21.2 mm	XPOTC18-1521270
250 x 21.2 mm	XPOTC18-2521270
150 x 30 mm	XPOTC18-1530070
250 x 30 mm	XPOTC18-2530070
150 x 50 mm	XPOTC18-1550070
250 x 50 mm	XPOTC18-2550070

MicroPulite® XP tPFP Column

XP tPFP can enhance the retention of polar compounds, and provide a different selectivity from C18\Phenyl-Hexyl. XP tPFP is suitable for the analysis of aromatic compounds, halogenated compounds, and planar position isomers.

Stationary Phase	Bonded Phase	Carbon Load	Surface area	End-capped	Pore Size	Particle Size	USP Classification	pH range	Temperature limit
XP tPFP		7%	185	No	130Å	1.7,2.5,3 3.5,5,7,10µm	L43	1-8	45°C (Low pH) 45°C (High pH)

◆Application Cases

Separation of Ethyl Position Isomers

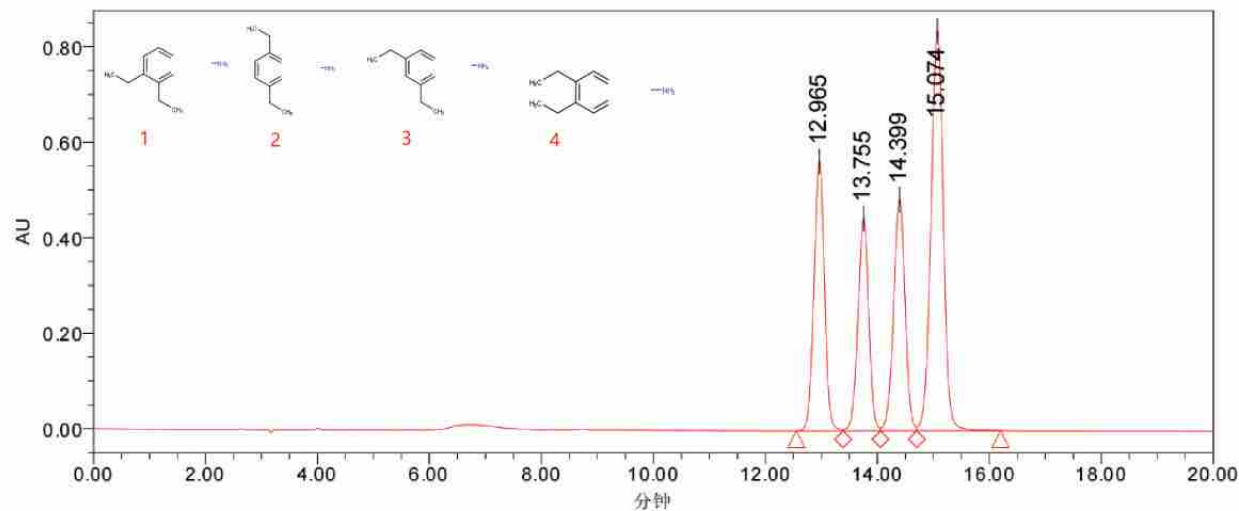
Column: MicroPulite® XP tPFP 3.5µm 250*4.6mm

Wavelength: UV 210nm

Flow rate: 1.0mL/min

Column temperature: 40°C

Chromatogram:



MicorPulite® XP tPFP Ordering Information

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

Particle Size: 2.5 µm	
Size	Part No
30x 2.1 mm	XPtPFP-032125
50x 2.1 mm	XPtPFP-052125
100x 2.1 mm	XPtPFP-102125
150 x 2.1 mm	XPtPFP-152125
30 x 3.0 mm	XPtPFP-033025
50 x 3.0 mm	XPtPFP-053025
100 x 3.0 mm	XPtPFP-103025
150 x 3.0 mm	XPtPFP-153025
250 x 3.0 mm	XPtPFP-253025
30 x 4.6 mm	XPtPFP-034625
50 x 4.6 mm	XPtPFP-054625
100 x 4.6 mm	XPtPFP-104625
150 x 4.6 mm	XPtPFP-154625
200 x 4.6 mm	XPtPFP-204625
250 x 4.6 mm	XPtPFP-254625

Particle Size: 3 µm	
Size	Part No
30x 2.1 mm	XPtPFP-032130
50x 2.1 mm	XPtPFP-052130
100x 2.1 mm	XPtPFP-102130
150 x 2.1 mm	XPtPFP-152130
30 x 3.0 mm	XPtPFP-033030
50 x 3.0 mm	XPtPFP-053030
100 x 3.0 mm	XPtPFP-103030
150 x 3.0 mm	XPtPFP-153030
250 x 3.0 mm	XPtPFP-253030
30 x 4.6 mm	XPtPFP-034630
50 x 4.6 mm	XPtPFP-054630
100 x 4.6 mm	XPtPFP-104630
150 x 4.6 mm	XPtPFP-154630
200 x 4.6 mm	XPtPFP-204630
250 x 4.6 mm	XPtPFP-254630

Particle Size: 3.5 µm	
Size	Part No
30x 2.1 mm	XPtPFP-032135
50x 2.1 mm	XPtPFP-052135
100x 2.1 mm	XPtPFP-102135
150 x 2.1 mm	XPtPFP-152135
30 x 3.0 mm	XPtPFP-033035
50 x 3.0 mm	XPtPFP-053035
100 x 3.0 mm	XPtPFP-103035
150 x 3.0 mm	XPtPFP-153035
250 x 3.0 mm	XPtPFP-253035
30 x 4.6 mm	XPtPFP-034635
50 x 4.6 mm	XPtPFP-054635
100 x 4.6 mm	XPtPFP-104635
150 x 4.6 mm	XPtPFP-154635
200 x 4.6 mm	XPtPFP-204635
250 x 4.6 mm	XPtPFP-254635

Particle Size: 5 µm	
Size	Part No
30x 2.1 mm	XPtPFP-032150
50x 2.1 mm	XPtPFP-052150
100x 2.1 mm	XPtPFP-102150
150 x 2.1 mm	XPtPFP-152150
30 x 3.0 mm	XPtPFP-033050
50 x 3.0 mm	XPtPFP-053050
100 x 3.0 mm	XPtPFP-103050
150 x 3.0 mm	XPtPFP-153050
250 x 3.0 mm	XPtPFP-253050
30 x 4.6 mm	XPtPFP-034650
50 x 4.6 mm	XPtPFP-054650
100 x 4.6 mm	XPtPFP-104650
150 x 4.6 mm	XPtPFP-154650
200 x 4.6 mm	XPtPFP-204650
250 x 4.6 mm	XPtPFP-254650

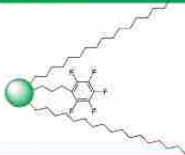
Particle Size: 5 µm	
Size	Part No
150 x 10 mm	XPtPFP-1510050
250 x 10 mm	XPtPFP-2510050
150 x 20 mm	XPtPFP-1520050
250 x 20 mm	XPtPFP-2520050
150 x 21.2 mm	XPtPFP-1521250
250 x 21.2 mm	XPtPFP-2521250
150 x 30 mm	XPtPFP-1530050
250 x 30 mm	XPtPFP-2530050
150 x 50 mm	XPtPFP-1550050
250 x 50 mm	XPtPFP-2550050

Particle Size: 7 µm	
Size	Part No
150 x 10 mm	XPtPFP-1510070
250 x 10 mm	XPtPFP-2510070
150 x 20 mm	XPtPFP-1520070
250 x 20 mm	XPtPFP-2520070
150 x 21.2 mm	XPtPFP-1521270
250 x 21.2 mm	XPtPFP-2521270
150 x 30 mm	XPtPFP-1530070
250 x 30 mm	XPtPFP-2530070
150 x 50 mm	XPtPFP-1550070
250 x 50 mm	XPtPFP-2550070

Particle Size: 10 µm	
Size	Part No
150 x 10 mm	XPtPFP-15100100
250 x 10 mm	XPtPFP-25100100
150 x 20 mm	XPtPFP-15200100
250 x 20 mm	XPtPFP-25200100
150 x 21.2 mm	XPtPFP-15212100
250 x 21.2 mm	XPtPFP-25212100
150 x 30 mm	XPtPFP-15300100
250 x 30 mm	XPtPFP-25300100
150 x 50 mm	XPtPFP-15500100
250 x 50 mm	XPtPFP-25500100

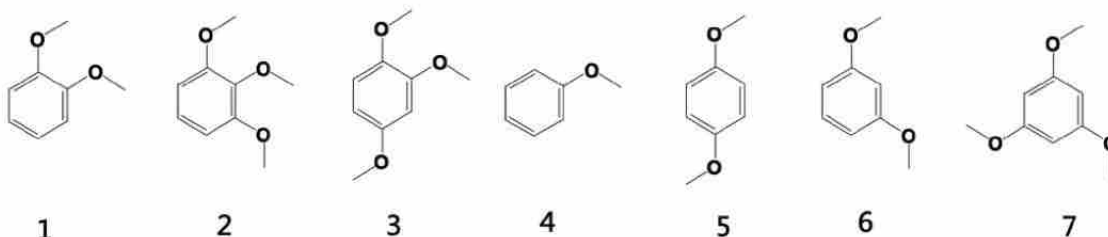
MicroPulite® XP tC18/PFP Column

XP tC18/PFP is mix mode of C18 and PFP, it has the hydrophobic effect of C18 and the selectivity of PFP. XP tC18/PFP has different selectivity from tC18 and PFP, which is affected by multiple mode, such as π - π interactions, dipole-dipole, hydrogen bonding and so on. The fully structured hybrid silica matrix with unique triple bonded technology, that make tC18/PFP stable in pH 1-12 and have excellent chemical stability and column life.

Stationary Phase	Bonded Phase	Carbon Load	Surface area	End-capped	Pore Size	Particle Size	USP Classification	pH range	Temperature limit
XP tC18/PFP		14.5%	185	No	130Å	3.5, 5µm	L1	1-12	45°C (Low pH) 45°C (High pH)

◆ Application Cases

Isolation of substituted methoxybenzene isomers

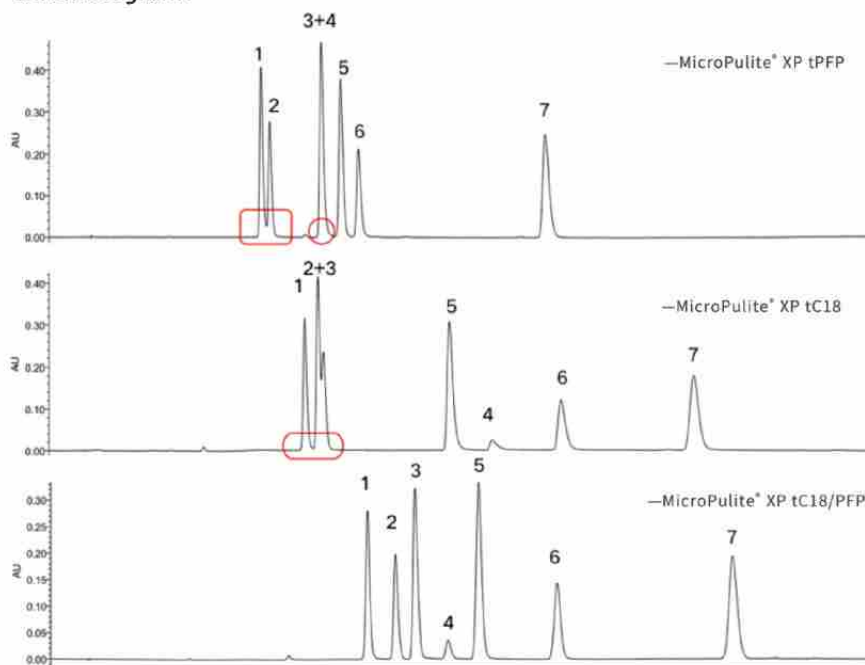


Mobile phase: Water: Methanol=65: 35

Wavelength: 230nm

Column temperature: 30°C

Chromatogram:



MicorPulite® XP tC18/PFP Ordering Information

Particle Size: 1.7 µm	
Size	Part No
30x 2.1 mm	XPtFP18-032117
50x 2.1 mm	XPtFP18-052117
100x 2.1 mm	XPtFP18-102117
150 x 2.1 mm	XPtFP18-152117
30 x 3.0 mm	XPtFP18-033017
50 x 3.0 mm	XPtFP18-053017
100 x 3.0 mm	XPtFP18-103017
150 x 3.0 mm	XPtFP18-153017

Particle Size: 2.5 µm	
Size	Part No
30x 2.1 mm	XPtFP18-032125
50x 2.1 mm	XPtFP18-052125
100x 2.1 mm	XPtFP18-102125
150 x 2.1 mm	XPtFP18-152125
30 x 3.0 mm	XPtFP18-033025
50 x 3.0 mm	XPtFP18-053025
100 x 3.0 mm	XPtFP18-103025
150 x 3.0 mm	XPtFP18-153025
250 x 3.0 mm	XPtFP18-253025
30 x 4.6 mm	XPtFP18-034625
50 x 4.6 mm	XPtFP18-054625
100 x 4.6 mm	XPtFP18-104625
150 x 4.6 mm	XPtFP18-154625
200 x 4.6 mm	XPtFP18-204625
250 x 4.6 mm	XPtFP18-254625

Particle Size: 3 µm	
Size	Part No
30x 2.1 mm	XPtFP18-032130
50x 2.1 mm	XPtFP18-052130
100x 2.1 mm	XPtFP18-102130
150 x 2.1 mm	XPtFP18-152130
30 x 3.0 mm	XPtFP18-033030
50 x 3.0 mm	XPtFP18-053030
100 x 3.0 mm	XPtFP18-103030
150 x 3.0 mm	XPtFP18-153030
250 x 3.0 mm	XPtFP18-253030
30 x 4.6 mm	XPtFP18-034630
50 x 4.6 mm	XPtFP18-054630
100 x 4.6 mm	XPtFP18-104630
150 x 4.6 mm	XPtFP18-154630
200 x 4.6 mm	XPtFP18-204630
250 x 4.6 mm	XPtFP18-254630

Particle Size: 3.5 µm	
Size	Part No
30x 2.1 mm	XPtFP18-032135
50x 2.1 mm	XPtFP18-052135
100x 2.1 mm	XPtFP18-102135
150 x 2.1 mm	XPtFP18-152135
30 x 3.0 mm	XPtFP18-033035
50 x 3.0 mm	XPtFP18-053035
100 x 3.0 mm	XPtFP18-103035
150 x 3.0 mm	XPtFP18-153035
250 x 3.0 mm	XPtFP18-253035
30 x 4.6 mm	XPtFP18-034635
50 x 4.6 mm	XPtFP18-054635
100 x 4.6 mm	XPtFP18-104635
150 x 4.6 mm	XPtFP18-154635
200 x 4.6 mm	XPtFP18-204635
250 x 4.6 mm	XPtFP18-254635

Particle Size: 5 µm	
Size	Part No
30x 2.1 mm	XPtFP18-032150
50x 2.1 mm	XPtFP18-052150
100x 2.1 mm	XPtFP18-102150
150 x 2.1 mm	XPtFP18-152150
30 x 3.0 mm	XPtFP18-033050
50 x 3.0 mm	XPtFP18-053050
100 x 3.0 mm	XPtFP18-103050
150 x 3.0 mm	XPtFP18-153050
250 x 3.0 mm	XPtFP18-253050
30 x 4.6 mm	XPtFP18-034650
50 x 4.6 mm	XPtFP18-054650
100 x 4.6 mm	XPtFP18-104650
150 x 4.6 mm	XPtFP18-154650
200 x 4.6 mm	XPtFP18-204650
250 x 4.6 mm	XPtFP18-254650

Particle Size: 5 µm	
Size	Part No
150 x 10 mm	XPtFP18-1510050
250 x 10 mm	XPtFP18-2510050
150 x 20 mm	XPtFP18-1520050
250 x 20 mm	XPtFP18-2520050
150 x 21.2 mm	XPtFP18-1521250
250 x 21.2 mm	XPtFP18-2521250
150 x 30 mm	XPtFP18-1530050
250 x 30 mm	XPtFP18-2530050
150 x 50 mm	XPtFP18-1550050
250 x 50 mm	XPtFP18-2550050

Particle Size: 7 µm	
Size	Part No
150 x 10 mm	XPtFP18-1510070
250 x 10 mm	XPtFP18-2510070
150 x 20 mm	XPtFP18-1520070
250 x 20 mm	XPtFP18-2520070
150 x 21.2 mm	XPtFP18-1521270
250 x 21.2 mm	XPtFP18-2521270
150 x 30 mm	XPtFP18-1530070
250 x 30 mm	XPtFP18-2530070
150 x 50 mm	XPtFP18-1550070
250 x 50 mm	XPtFP18-2550070

Particle Size: 10 µm	
Size	Part No
150 x 10 mm	XPtFP18-15100100
250 x 10 mm	XPtFP18-25100100
150 x 20 mm	XPtFP18-15200100
250 x 20 mm	XPtFP18-25200100
150 x 21.2 mm	XPtFP18-15212100
250 x 21.2 mm	XPtFP18-25212100
150 x 30 mm	XPtFP18-15300100
250 x 30 mm	XPtFP18-25300100
150 x 50 mm	XPtFP18-15500100
250 x 50 mm	XPtFP18-25500100

MicroPulite® XP tC18-AX Column

XP tC18-AX is hybrid silica with reverse phase and anion exchange mixed mode, which is stable in the pH range of 2-10 and compatible with 100% aqueous phase. The design of XP tC18-AX with positively charged functional groups enables it to generate ion exchange forces with negatively charged compounds, thereby enhancing the retention of polar acidic compounds and providing selectivity different from C18 columns. When analyzing alkaline compounds under acidic conditions, the retention of alkaline compounds is weakened due to the repulsive forces between the same charges, and the tailing factor decreases, thereby improving the peak shape of alkaline compounds.

Stationary Phase	Bonded Phase	Carbon Load	Surface area	End-capped	Pore Size	Particle Size	USP Classification	pH range	Temperature limit
tC18-AX		17%	185	Yes	130Å	1.7, 2.5, 3, 3.5, 5, 7, 10µm	L78	2-10	60°C (Low pH) 60°C (High pH)

◆Application Cases

Methodology: Self developed

Column: MicroPulite® XP tC18-AX 4.6*250mm 5µm

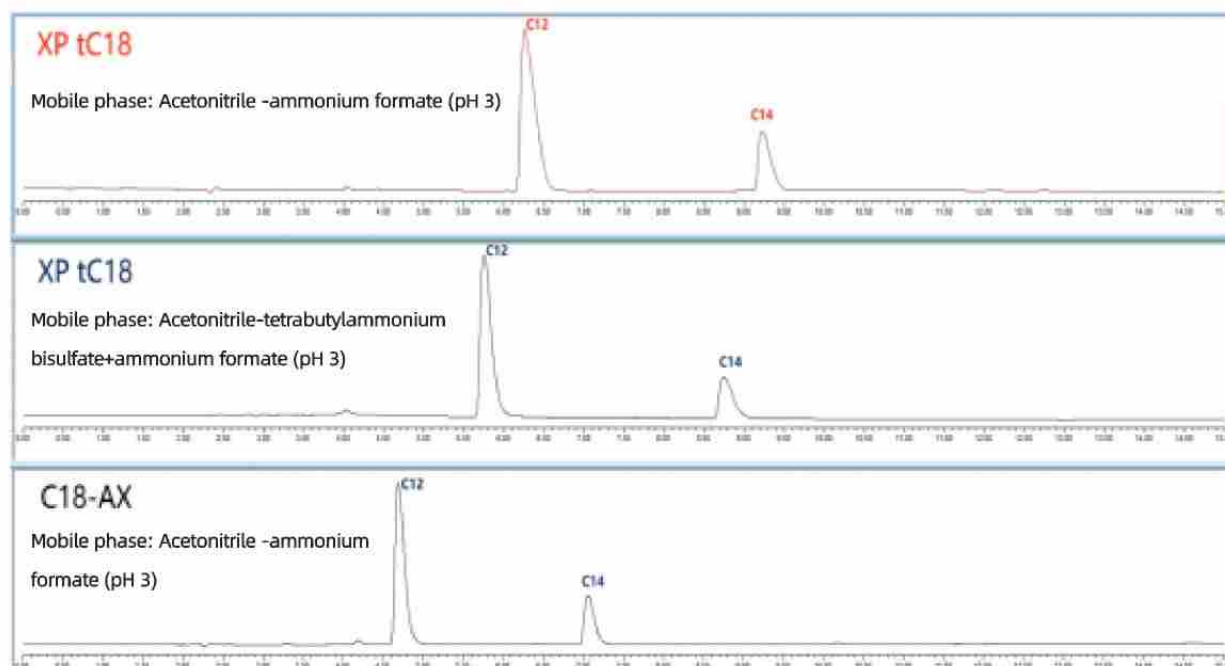
Wavelength: UV 262nm

Flow rate: 1.0mL/min

Column temperature: 40°C

Mobile phase:

Chromatogram:



MicroPulite® XPtC18-AX Ordering Information

Particle Size: 1.7 µm	
Size	Part No
50x 2.1 mm	XPtC18AX-052117
100x 2.1 mm	XPtC18AX-102117
150x 2.1 mm	XPtC18AX-152117
30 x 3.0 mm	XPtC18AX-033017
50 x 3.0 mm	XPtC18AX-053017
100 x 3.0 mm	XPtC18AX-103017
150 x 3.0 mm	XPtC18AX-153017

Particle Size: 2.5 µm	
Size	Part No
30x 2.1 mm	XPtC18AX-032125
50x 2.1 mm	XPtC18AX-052125
100x 2.1 mm	XPtC18AX-102125
150 x 2.1 mm	XPtC18AX-152125
30 x 3.0 mm	XPtC18AX-033025
50 x 3.0 mm	XPtC18AX-053025
100 x 3.0 mm	XPtC18AX-103025
150 x 3.0 mm	XPtC18AX-153025
250 x 3.0 mm	XPtC18AX-253025
30 x 4.6 mm	XPtC18AX-034625
50 x 4.6 mm	XPtC18AX-054625
100 x 4.6 mm	XPtC18AX-104625
150 x 4.6 mm	XPtC18AX-154625
200 x 4.6 mm	XPtC18AX-204625
250 x 4.6 mm	XPtC18AX-254625

Particle Size: 3 µm	
Size	Part No
30x 2.1 mm	XPtC18AX-032130
50x 2.1 mm	XPtC18AX-052130
100x 2.1 mm	XPtC18AX-102130
150 x 2.1 mm	XPtC18AX-152130
30 x 3.0 mm	XPtC18AX-033030
50 x 3.0 mm	XPtC18AX-053030
100 x 3.0 mm	XPtC18AX-103030
150 x 3.0 mm	XPtC18AX-153030
250 x 3.0 mm	XPtC18AX-253030
30 x 4.6 mm	XPtC18AX-034630
50 x 4.6 mm	XPtC18AX-054630
100 x 4.6 mm	XPtC18AX-104630
150 x 4.6 mm	XPtC18AX-154630
200 x 4.6 mm	XPtC18AX-204630
250 x 4.6 mm	XPtC18AX-254630

Particle Size: 3.5 µm	
Size	Part No
30x 2.1 mm	XPtC18AX-032135
50x 2.1 mm	XPtC18AX-052135
100x 2.1 mm	XPtC18AX-102135
150 x 2.1 mm	XPtC18AX-152135
30 x 3.0 mm	XPtC18AX-033035
50 x 3.0 mm	XPtC18AX-053035
100 x 3.0 mm	XPtC18AX-103035
150 x 3.0 mm	XPtC18AX-153035
250 x 3.0 mm	XPtC18AX-253035
30 x 4.6 mm	XPtC18AX-034635
50 x 4.6 mm	XPtC18AX-054635
100 x 4.6 mm	XPtC18AX-104635
150 x 4.6 mm	XPtC18AX-154635
200 x 4.6 mm	XPtC18AX-204635
250 x 4.6 mm	XPtC18AX-254635

Particle Size: 5 µm	
Size	Part No
30x 2.1 mm	XPtC18AX-032150
50x 2.1 mm	XPtC18AX-052150
100x 2.1 mm	XPtC18AX-102150
150 x 2.1 mm	XPtC18AX-152150
30 x 3.0 mm	XPtC18AX-033050
50 x 3.0 mm	XPtC18AX-053050
100 x 3.0 mm	XPtC18AX-103050
150 x 3.0 mm	XPtC18AX-153050
250 x 3.0 mm	XPtC18AX-253050
30 x 4.6 mm	XPtC18AX-034650
50 x 4.6 mm	XPtC18AX-054650
100 x 4.6 mm	XPtC18AX-104650
150 x 4.6 mm	XPtC18AX-154650
200 x 4.6 mm	XPtC18AX-204650
250 x 4.6 mm	XPtC18AX-254650

Particle Size: 5 µm	
Size	Part No
150 x 10 mm	XPtC18AX-1510050
250 x 10 mm	XPtC18AX-2510050
150 x 20 mm	XPtC18AX-1520050
250 x 20 mm	XPtC18AX-2520050
150 x 21.2 mm	XPtC18AX-1521250
250 x 21.2 mm	XPtC18AX-2521250
150 x 30 mm	XPtC18AX-1530050
250 x 30 mm	XPtC18AX-2530050
150 x 50 mm	XPtC18AX-1550050
250 x 50 mm	XPtC18AX-2550050

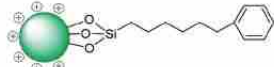
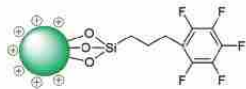
Particle Size: 7 µm	
Size	Part No
150 x 10 mm	XPtC18AX-1510070
250 x 10 mm	XPtC18AX-2510070
150 x 20 mm	XPtC18AX-1520070
250 x 20 mm	XPtC18AX-2520070
150 x 21.2 mm	XPtC18AX-1521270
250 x 21.2 mm	XPtC18AX-2521270
150 x 30 mm	XPtC18AX-1530070
250 x 30 mm	XPtC18AX-2530070
150 x 50 mm	XPtC18AX-1550070
250 x 50 mm	XPtC18AX-2550070

Particle Size: 10 µm	
Size	Part No
150 x 10 mm	XPtC18AX-15100100
250 x 10 mm	XPtC18AX-25100100
150 x 20 mm	XPtC18AX-15200100
250 x 20 mm	XPtC18AX-25200100
150 x 21.2 mm	XPtC18AX-15212100
250 x 21.2 mm	XPtC18AX-25212100
150 x 30 mm	XPtC18AX-15300100
250 x 30 mm	XPtC18AX-25300100
150 x 50 mm	XPtC18AX-15500100
250 x 50 mm	XPtC18AX-25500100

MicroPulite® PHS XP Series

The PHS XP Series Column adopt surface-charged hybrid silica technology to provide symmetrical and superior peak shapes for basic compounds. The positive surface charge rejects the ionized basic compounds in the low ionic strength separation system, and inhibits the ion exchange between the basic compounds and the residual silanol groups, so PHS XP series column can improved peak shape of basic compounds. This series of Columns provides specifications from UPLC/UHPLC, HPLC to preparative chromatography, thus make method development and method transfer more efficient and continuous.

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

Stationary Phase	Bonded Phase	Carbon Load	Pore Size	Particle Size	USP Classification	pH range	Temperature limit
PHS XP tc18		17%	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		15%	130Å	1.7,2.5,3.3,5, 5,7,10µm	L11	1-11	80°C (Low pH) 45°C (High pH)
PHS XP tF5		10%	130Å	1.7,2.5,3.3,5, 5,7,10µm	L43	1-8	60°C (Low pH) 45°C (High pH)

MicroPulite® PHS XP tC18 Column

PHS XP tC18 is a general-purpose C18, due to its low level of positive charge on the surface, it improves the tailing factor of basic compounds under low ionic strength mobile phase without ion pair reagents (e.g., 0.1% formic acid). So PHS XP tC18 has superior peak shape, large sample loading and peak capacity for basic compounds. PHS XP tC18 is stable in pH 1 ~11, is suitable for the analysis of basic compounds, and especially performs well for peptide loading and peak shape.

Stationary Phase	Bonded Phase	Carbon Load	Surface area	End-capped	Pore Size	Particle Size	USP Classification	pH range	Temperature limit
PHS XP tC18		17%	185	Yes	130Å	1.7, 2.5, 3, 3.5, 5, 7µm	L1	1-11	80°C (Low pH) 45°C (High pH)

◆ Application Cases

Determination of related substances of gabapentin

Method: Pharmacopoeia of the People's Republic of China 2020

Column: MicroPulite® PHS XP tC18 4.6*150mm 5µm (Part No: XPTC18P-154650)

Wavelength: UV 210nm

Flow rate: 1.5mL/min

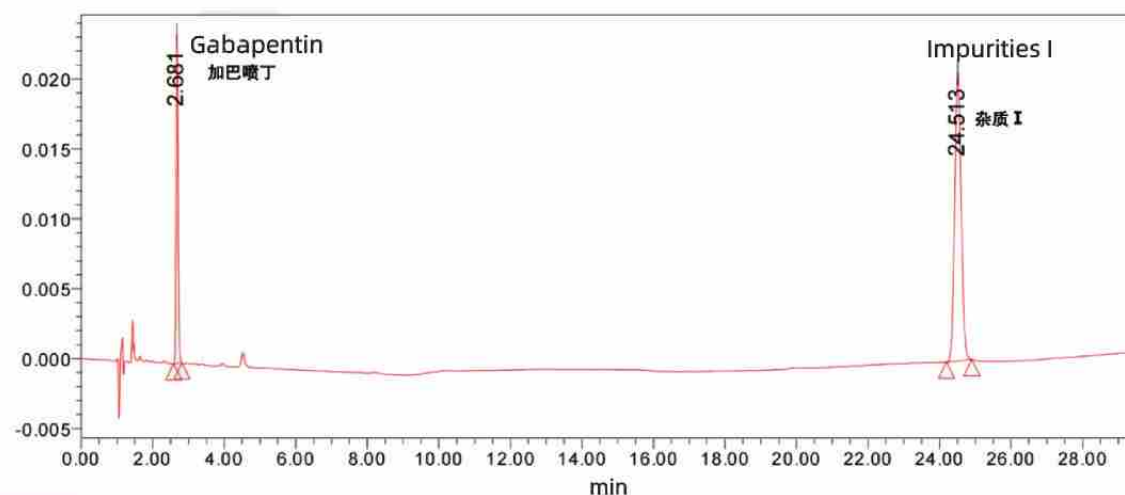
Column temperature: 40°C

Mobile phase: Phase A: phosphate buffer (1.2g potassium dihydrogen phosphate, dissolve in 940mL water, potassium hydroxide adjust pH to 6.9) - acetonitrile = (94: 6)

Phase B: phosphate buffer (1.2g potassium dihydrogen phosphate, dissolve in 940mL water, potassium hydroxide adjust pH to 6.9) - acetonitrile = (7:3)

t(min)	A%	B%
0	100	0
7	100	0
45	0	100

Chromatogram:



Determination of Related Substances of Lincomycin Hydrochloride

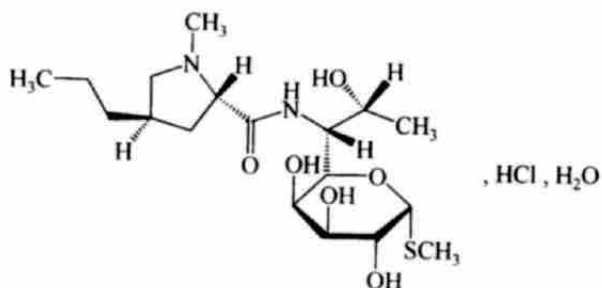
Methodology: Pharmacopoeia of the People's Republic of China 2020

Column: MicroPulite® PHS XP tC18 4.6*250mm 5µm(Part No: XPtC18P-254650) Wavelength: UV 214nm

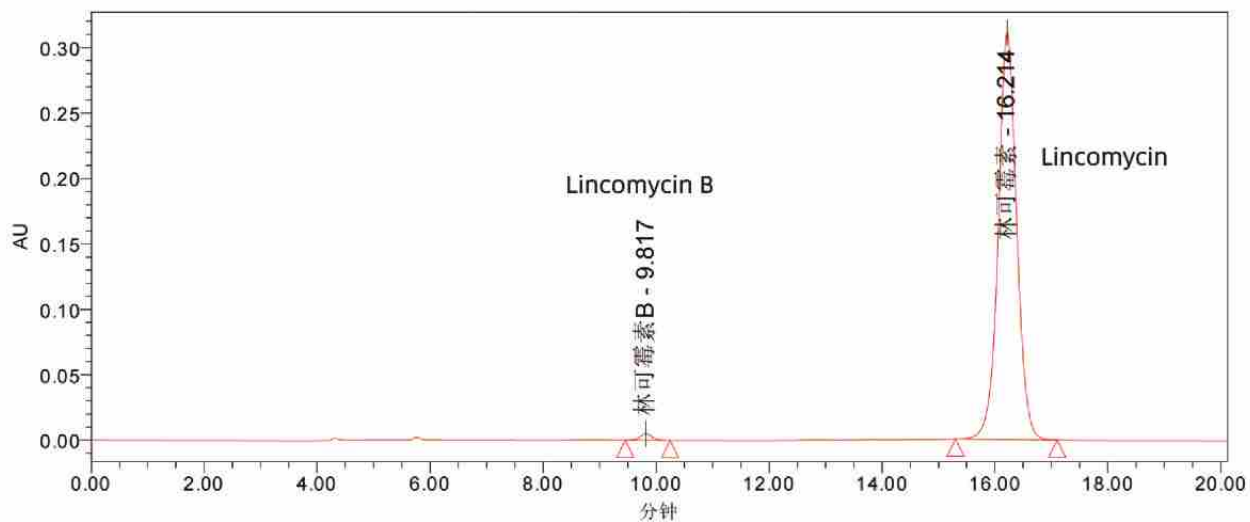
Flow rate: 0.6mL/min

Column temperature: 40°C

Mobile phase: 0.05 mol/L borax solution (pH adjusted to 6.1 with phosphoric acid)-methanol (1:1)



Chromatogram:



MicroPulite® PHS XP tC18 Ordering Information

Particle Size: 1.7 µm	
Size	Part No
50x 2.1 mm	XPtC18P-052117
100x 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	Part No
30x 2.1 mm	XPtC18P-032125
50x 2.1 mm	XPtC18P-052125
100x 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
200 x 4.6 mm	XPtC18P-204625
250 x 4.6 mm	XPtC18P-254625

Particle Size: 3 µm	
Size	Part No
30x 2.1 mm	XPtC18P-032130
50x 2.1 mm	XPtC18P-052130
100x 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
200 x 4.6 mm	XPtC18P-204630
250 x 4.6 mm	XPtC18P-254630

Particle Size: 3.5 µm	
Size	Part No
30x 2.1 mm	XPtC18P-032135
50x 2.1 mm	XPtC18P-052135
100x 2.1 mm	XPtC18P-102135
150 x 2.1 mm	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
200 x 4.6 mm	XPtC18P-204635
250 x 4.6 mm	XPtC18P-254635

Particle Size: 5 µm	
Size	Part No
30x 2.1 mm	XPtC18P-032150
50x 2.1 mm	XPtC18P-052150
100x 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
200 x 4.6 mm	XPtC18P-204650
250 x 4.6 mm	XPtC18P-254650

Particle Size: 5 µm	
Size	Part No
150 x 10 mm	XPtC18P-1510050
250 x 10 mm	XPtC18P-2510050
150 x 20 mm	XPtC18P-1520050
250 x 20 mm	XPtC18P-2520050
150 x 21.2 mm	XPtC18P-1521250
250 x 21.2 mm	XPtC18P-2521250
150 x 30 mm	XPtC18P-1530050
250 x 30 mm	XPtC18P-2530050
150 x 50 mm	XPtC18P-1550050
250 x 50 mm	XPtC18P-2550050

Particle Size: 7 µm	
Size	Part No
150 x 10 mm	XPtC18P-1510070
250 x 10 mm	XPtC18P-2510070
150 x 20 mm	XPtC18P-1520070
250 x 20 mm	XPtC18P-2520070
150 x 21.2 mm	XPtC18P-1521270
250 x 21.2 mm	XPtC18P-2521270
150 x 30 mm	XPtC18P-1530070
250 x 30 mm	XPtC18P-2530070
150 x 50 mm	XPtC18P-1550070
250 x 50 mm	XPtC18P-2550070

Particle Size: 10 µm	
Size	Part No
150 x 10 mm	XPtC18P-15100100
250 x 10 mm	XPtC18P-25100100
150 x 20 mm	XPtC18P-15200100
250 x 20 mm	XPtC18P-25200100
150 x 21.2 mm	XPtC18P-15212100
250 x 21.2 mm	XPtC18P-25212100
150 x 30 mm	XPtC18P-15300100
250 x 30 mm	XPtC18P-25300100
150 x 50 mm	XPtC18P-15500100
250 x 50 mm	XPtC18P-25500100

MicroPulite® PHS XP Phenyl-Hexyl Column

PHS XP Phenyl-Hexyl provides selectivity complementary to straight-chain C18, hybrid silica technology enhances chemical resistance, it can use in pH 1-11 range. The characteristic of surface charge improves peak shape and loading of basic compounds, PHS XP Phenyl-Hexyl is suitable for the analysis of aromatic compounds.

Stationary Phase	Bonded Phase	Carbon Load	Surface area	End-capped	Pore Size	Particle Size	USP Classification	pH range	Temperature limit
PHS XP Phenyl-Hexyl		15%	185	Yes	130Å	1.7, 2.5, 3.5, 5, 7, 10 µm	L11	1-11	80°C (Low pH) 45°C (High pH)

MicroPulite® PHS XP Phenyl-Hexyl Ordering Information

Particle Size: 1.7 µm		Particle Size: 2.5 µm		Particle Size: 3 µm	
Size	Part No	Size	Part No	Size	Part No
50x 2.1 mm	PHSPH-052117	30x 2.1 mm	PHSPH-032125	30x 2.1 mm	PHSPH-032130
100x 2.1 mm	PHSPH-102117	50x 2.1 mm	PHSPH-052125	50x 2.1 mm	PHSPH-052130
150 x 2.1 mm	PHSPH-152117	100x 2.1 mm	PHSPH-102125	100x 2.1 mm	PHSPH-102130
30 x 3.0 mm	PHSPH-033017	150 x 2.1 mm	PHSPH-152125	150 x 2.1 mm	PHSPH-152130
50 x 3.0 mm	PHSPH-053017	30 x 3.0 mm	PHSPH-033025	30 x 3.0 mm	PHSPH-033030
100 x 3.0 mm	PHSPH-103017	50 x 3.0 mm	PHSPH-053025	50 x 3.0 mm	PHSPH-053030
150 x 3.0 mm	PHSPH-153017	100 x 3.0 mm	PHSPH-103025	100 x 3.0 mm	PHSPH-103030
		150 x 3.0 mm	PHSPH-153025	150 x 3.0 mm	PHSPH-153030
		250 x 3.0 mm	PHSPH-253025	250 x 3.0 mm	PHSPH-253030
		30 x 4.6 mm	PHSPH-034625	30 x 4.6 mm	PHSPH-034630
		50 x 4.6 mm	PHSPH-054625	50 x 4.6 mm	PHSPH-054630
		100 x 4.6 mm	PHSPH-104625	100 x 4.6 mm	PHSPH-104630
		150 x 4.6 mm	PHSPH-154625	150 x 4.6 mm	PHSPH-154630
		200 x 4.6 mm	PHSPH-204625	200 x 4.6 mm	PHSPH-204630
		250 x 4.6 mm	PHSPH-254625	250 x 4.6 mm	PHSPH-254630

Particle Size: 3.5 µm		Particle Size: 5 µm	
Size	Part No	Size	Part No
30x 2.1 mm	PHSPH-032135	30x 2.1 mm	PHSPH-032150
50x 2.1 mm	PHSPH-052135	50x 2.1 mm	PHSPH-052150
100x 2.1 mm	PHSPH-102135	100x 2.1 mm	PHSPH-102150
150 x 2.1 mm	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
200 x 4.6 mm	PHSPH-204635	200 x 4.6 mm	PHSPH-204650
250 x 4.6 mm	PHSPH-254635	250 x 4.6 mm	PHSPH-254650

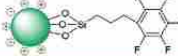
Particle Size: 5 μ m	
Size	Part No
150 x 10 mm	PHSPH-1510050
250 x 10 mm	PHSPH-2510050
150 x 20 mm	PHSPH-1520050
250 x 20 mm	PHSPH-2520050
150 x 21.2 mm	PHSPH-1521250
250 x 21.2 mm	PHSPH-2521250
150 x 30 mm	PHSPH-1530050
250 x 30 mm	PHSPH-2530050
150 x 50 mm	PHSPH-1550050
250 x 50 mm	PHSPH-2550050

Particle Size: 7 μ m	
Size	Part No
150 x 10 mm	PHSPH-1510070
250 x 10 mm	PHSPH-2510070
150 x 20 mm	PHSPH-1520070
250 x 20 mm	PHSPH-2520070
150 x 21.2 mm	PHSPH-1521270
250 x 21.2 mm	PHSPH-2521270
150 x 30 mm	PHSPH-1530070
250 x 30 mm	PHSPH-2530070
150 x 50 mm	PHSPH-1550070
250 x 50 mm	PHSPH-2550070

Particle Size: 10 μ m	
Size	Part No
150 x 10 mm	PHSPH-15100100
250 x 10 mm	PHSPH-25100100
150 x 20 mm	PHSPH-15200100
250 x 20 mm	PHSPH-25200100
150 x 21.2 mm	PHSPH-15212100
250 x 21.2 mm	PHSPH-25212100
150 x 30 mm	PHSPH-15300100
250 x 30 mm	PHSPH-25300100
150 x 50 mm	PHSPH-15500100
250 x 50 mm	PHSPH-25500100

MicroPulite® PHS XP tF5 Column

PHS XP tF5 is a surface charged pentafluorophenyl column, suitable for the analysis of aromatic compounds, halogenated compounds, and planar position isomers.

Stationary Phase	Bonded Phase	Carbon Load	Surface area	End-capped	Pore Size	Particle Size	USP Classification	pH range	Temperature limit
PHS XP tF5		10%	185	No	130Å	1.7, 2.5, 3.5 5, 7, 10 µm	L43	1-8	60°C (Low pH) 45°C (High pH)

◆ Application Cases

Isolation of tert-butylphenol positional isomers

Method: Self-research

Column: MicroPulite® PHS XP tF5 3.5µm 150*4.6mm (Part No: PHStF5-154635)

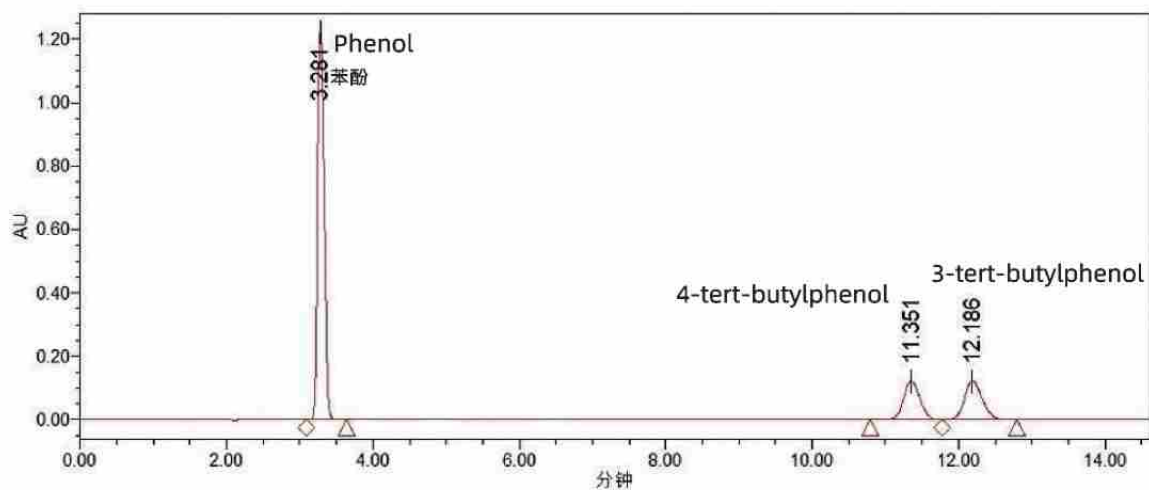
Wavelength: UV 270nm

Flow rate: 1mL/min

Column temperature: 40°C

Mobile phase: Methanol: 0.5% acetic acid solution= (35: 65)

Chromatogram:



MicroPulite® PHS XP tF5 Column

[illegible]

Particle Size: 2.5 µm	
Size	Part No
30x 2.1 mm	PHStF5-032125
50x 2.1 mm	PHStF5-052125
100x 2.1 mm	PHStF5-102125
150 x 2.1 mm	PHStF5-152125
30 x 3.0 mm	PHStF5-033025
50 x 3.0 mm	PHStF5-053025
100 x 3.0 mm	PHStF5-103025
150 x 3.0 mm	PHStF5-153025
250 x 3.0 mm	PHStF5-253025
30 x 4.6 mm	PHStF5-034625
50 x 4.6 mm	PHStF5-054625
100 x 4.6 mm	PHStF5-104625
150 x 4.6 mm	PHStF5-154625
200 x 4.6 mm	PHStF5-204625
250 x 4.6 mm	PHStF5-254625

Particle Size: 3 µm	
Size	Part No
30x 2.1 mm	PHStF5-032130
50x 2.1 mm	PHStF5-052130
100x 2.1 mm	PHStF5-102130
150 x 2.1 mm	PHStF5-152130
30 x 3.0 mm	PHStF5-033030
50 x 3.0 mm	PHStF5-053030
100 x 3.0 mm	PHStF5-103030
150 x 3.0 mm	PHStF5-153030
250 x 3.0 mm	PHStF5-253030
30 x 4.6 mm	PHStF5-034630
50 x 4.6 mm	PHStF5-054630
100 x 4.6 mm	PHStF5-104630
150 x 4.6 mm	PHStF5-154630
200 x 4.6 mm	PHStF5-204630
250 x 4.6 mm	PHStF5-254630

Particle Size: 3.5 µm	
Size	Part No
30x 2.1 mm	PHStF5-032135
50x 2.1 mm	PHStF5-052135
100x 2.1 mm	PHStF5-102135
150 x 2.1 mm	PHStF5-152135
30 x 3.0 mm	PHStF5-033035
50 x 3.0 mm	PHStF5-053035
100 x 3.0 mm	PHStF5-103035
150 x 3.0 mm	PHStF5-153035
250 x 3.0 mm	PHStF5-253035
30 x 4.6 mm	PHStF5-034635
50 x 4.6 mm	PHStF5-054635
100 x 4.6 mm	PHStF5-104635
150 x 4.6 mm	PHStF5-154635
200 x 4.6 mm	PHStF5-204635
250 x 4.6 mm	PHStF5-254635

Particle Size: 5 µm	
Size	Part No
30x 2.1 mm	PHStF5-032150
50x 2.1 mm	PHStF5-052150
100x 2.1 mm	PHStF5-102150
150 x 2.1 mm	PHStF5-152150
30 x 3.0 mm	PHStF5-033050
50 x 3.0 mm	PHStF5-053050
100 x 3.0 mm	PHStF5-103050
150 x 3.0 mm	PHStF5-153050
250 x 3.0 mm	PHStF5-253050
30 x 4.6 mm	PHStF5-034650
50 x 4.6 mm	PHStF5-054650
100 x 4.6 mm	PHStF5-104650
150 x 4.6 mm	PHStF5-154650
200 x 4.6 mm	PHStF5-204650
250 x 4.6 mm	PHStF5-254650

Particle Size: 5 µm	
Size	Part No
150 x 10 mm	PHStF5-1510050
250 x 10 mm	PHStF5-2510050
150 x 20 mm	PHStF5-1520050
250 x 20 mm	PHStF5-2520050
150 x 21.2 mm	PHStF5-1521250
250 x 21.2 mm	PHStF5-2521250
150 x 30 mm	PHStF5-1530050
250 x 30 mm	PHStF5-2530050
150 x 50 mm	PHStF5-1550050
250 x 50 mm	PHStF5-2550050

Particle Size: 7 µm	
Size	Part No
150 x 10 mm	PHStF5-1510070
250 x 10 mm	PHStF5-2510070
150 x 20 mm	PHStF5-1520070
250 x 20 mm	PHStF5-2520070
150 x 21.2 mm	PHStF5-1521270
250 x 21.2 mm	PHStF5-2521270
150 x 30 mm	PHStF5-1530070
250 x 30 mm	PHStF5-2530070
150 x 50 mm	PHStF5-1550070
250 x 50 mm	PHStF5-2550070

Particle Size: 10 µm	
Size	Part No
150 x 10 mm	PHStF5-15100100
250 x 10 mm	PHStF5-25100100
150 x 20 mm	PHStF5-15200100
250 x 20 mm	PHStF5-25200100
150 x 21.2 mm	PHStF5-15212100
250 x 21.2 mm	PHStF5-25212100
150 x 30 mm	PHStF5-15300100
250 x 30 mm	PHStF5-25300100
150 x 50 mm	PHStF5-15500100
250 x 50 mm	PHStF5-25500100

MicroPulite® Perfect Series: A balance column that retains polar compounds

The Perfect series of columns are suitable for polar compounds, the columns retain and separate polar analytes under reversed-phase or HILIC conditions. With WePure's unique endcapped technology, the perfect column has superior peak shapes. Diol column can be used in reverse phase and HILIC modes, or as silica column in normal-phase. HILIC is suitable for the separation of polar compounds in hilic mode, and can be used as a normal phase silica column. Perfect T3 enhances retention of polar compounds in reverse phase, thus Perfect series provide a multidimensional option for polar compound analysis.

◆ Characteristic

- Enhance retention of polar compounds, while maintain retention of moderately and strongly hydrophobic compounds
- Advanced bonded and endcapped technology, LC-MS compatible
- compatible with 100% aqueous mobile phase
- Excellent reproducibility

Stationary Phase	Bonded Phase	Carbon Load	Pore Size	Particle Size	USP Classification	pH range	Temperature limit
Perfect T3		14%	120Å	3, 5, 10µm	L1	1-8	45°C (Low pH) 45°C (High pH)
Perfect T3 SB		14%	120Å	3, 5, 10µm	L1	1-8	45°C (Low pH) 45°C (High pH)
Perfect Diol		15%	120Å	3, 5, 10µm	L20	1-8	60°C (Low pH) 60°C (High pH)
Perfect HILIC		-	120Å	3, 5, 10µm	L3	1-5	45°C (Low pH) 45°C (High pH)

MicroPulite® Perfect T3 Column

Perfect T3 is also general purpose C18, compatible with 100% aqueous mobile phase. With unique triple bonded and endcapped technology, the column has better tolerance in 100% aqueous mobile phase, and maximize retention of polar compounds under reversed phase conditions. Perfect T3 analysis 13 organic carboxylic acids, the result shows that all compounds are ideally retained with excellent peak shapes, making it the best choice of polar analytes in the carboxylic acid group.

Stationary Phase	Bonded Phase	Carbon Load	Surface area	End-capped	Pore Size	Particle Size	USP Classification	pH range	Temperature limit
T3		14%	300	Yes	120Å	3,5,10µm	L1	2-8	45°C (Low pH) 45°C (High pH)

◆ Application Cases

Characteristic chromatogram and Content Determination of Prunella vulgaris Formulated Granules

Method: National Drug Standard for Chinese Medicine Formula Granules (Good Batch)

Project: Characteristic chromatogram

Column: MicroPulite® PerfectT3 4.6*250mm 5.0µm (Part No: PFTT3-254650)

Wavelength: UV280nm

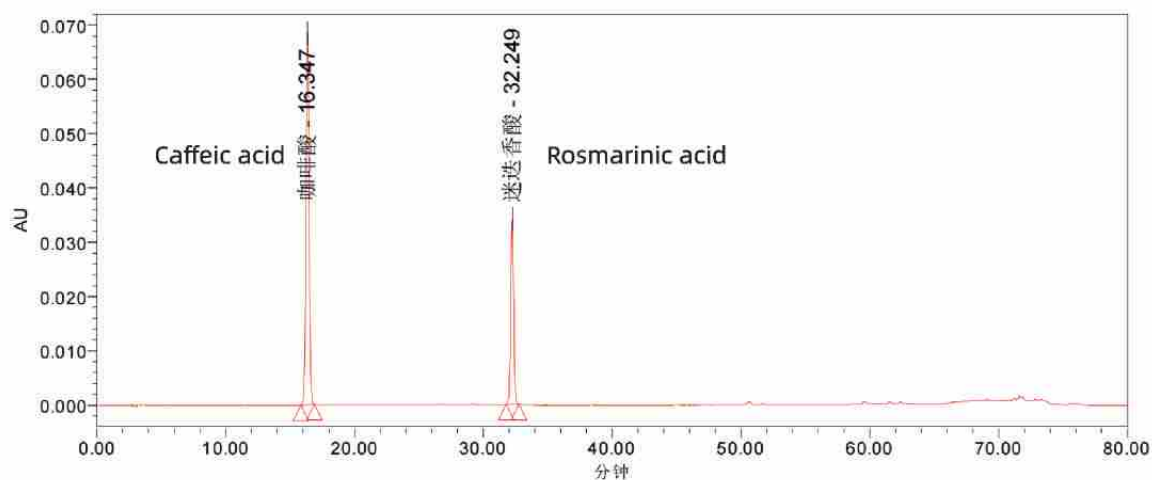
Flow rate: 1.0mL/min

Column temperature: 30°C

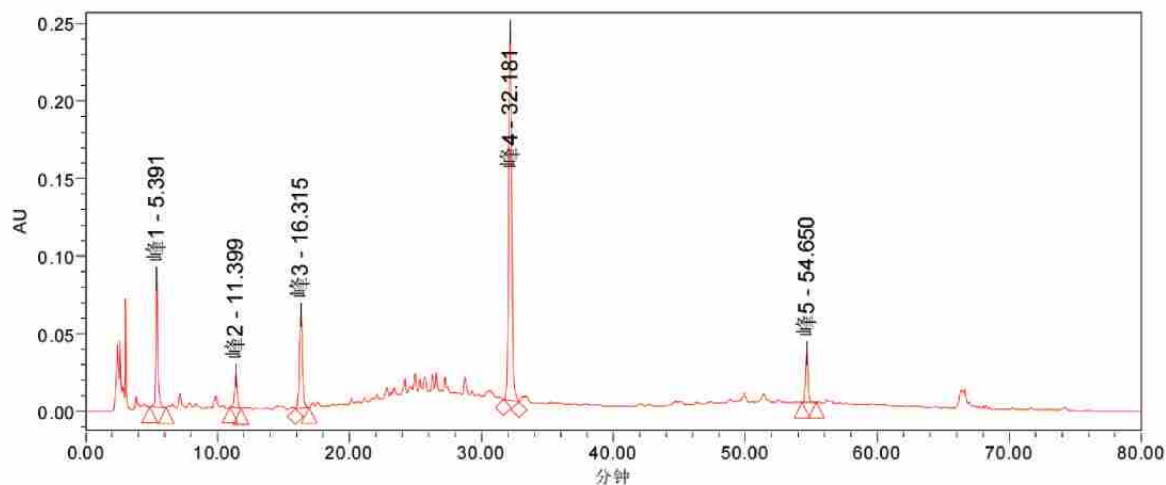
Mobile phase: Phase A: acetonitrile, Phase B: 0.1% phosphoric acid solution

Time	A%	B%
0	10	90
10	10	90
22	22	78
37	22	78
62	38	62
65	90	10

Chromatogram:



Reference solution



Analysis of 13 organic acids

Method: Self-research

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

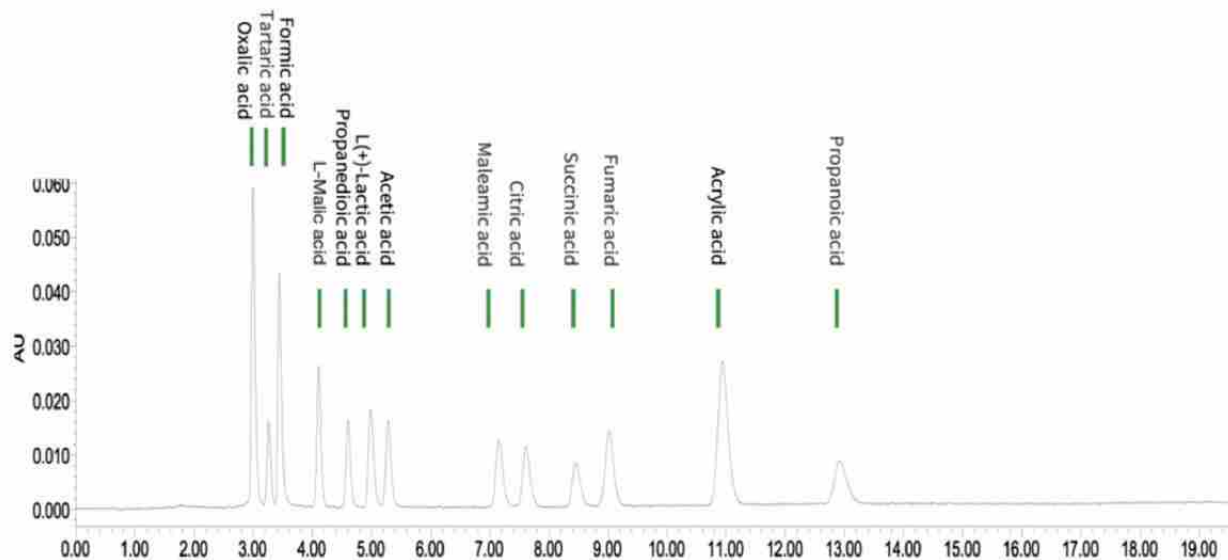
Wavelength: UV 220nm

Flow rate: 1mL/min

Column temperature: 37°C

Mobile phase: 0.1% Phosphoric acid solution

Chromatogram:



MicroPulite® Perfect T3 Ordering Information

Particle Size: 3 µm	
Size	Part No
30x 2.1 mm	PFTT3-032130
50x 2.1 mm	PFTT3-052130
100x 2.1 mm	PFTT3-102130
150 x 2.1 mm	PFTT3-152130
30 x 3.0 mm	PFTT3-033030
50 x 3.0 mm	PFTT3-053030
100 x 3.0 mm	PFTT3-103030
150 x 3.0 mm	PFTT3-153030
250 x 3.0 mm	PFTT3-253030
30 x 4.6 mm	PFTT3-034630
50 x 4.6 mm	PFTT3-054630
100 x 4.6 mm	PFTT3-104630
150 x 4.6 mm	PFTT3-154630
200 x 4.6 mm	PFTT3-204630
250 x 4.6 mm	PFTT3-254630

Particle Size: 3.5 µm	
Size	Part No
30x 2.1 mm	PFTT3-032150
50x 2.1 mm	PFTT3-052150
100x 2.1 mm	PFTT3-102150
150 x 2.1 mm	PFTT3-152150
30 x 3.0 mm	PFTT3-033050
50 x 3.0 mm	PFTT3-053050
100 x 3.0 mm	PFTT3-103050
150 x 3.0 mm	PFTT3-153050
250 x 3.0 mm	PFTT3-253050
30 x 4.6 mm	PFTT3-034650
50 x 4.6 mm	PFTT3-054650
100 x 4.6 mm	PFTT3-104650
150 x 4.6 mm	PFTT3-154650
200 x 4.6 mm	PFTT3-204650
250 x 4.6 mm	PFTT3-254650

Particle Size: 5 µm	
Size	Part No
150 x 10 mm	PFTT3-1510050
250 x 10 mm	PFTT3-2510050
150 x 20 mm	PFTT3-1520050
250 x 20 mm	PFTT3-2520050
150 x 21.2 mm	PFTT3-1521250
250 x 21.2 mm	PFTT3-2521250
150 x 30 mm	PFTT3-1530050
250 x 30 mm	PFTT3-2530050
150 x 50 mm	PFTT3-1550050
250 x 50 mm	PFTT3-2550050

Particle Size: 10 µm	
Size	Part No
150 x 10 mm	PFTT3-15100100
250 x 10 mm	PFTT3-25100100
150 x 20 mm	PFTT3-15200100
250 x 20 mm	PFTT3-25200100
150 x 21.2 mm	PFTT3-15212100
250 x 21.2 mm	PFTT3-25212100
150 x 30 mm	PFTT3-15300100
250 x 30 mm	PFTT3-25300100
150 x 50 mm	PFTT3-15500100
250 x 50 mm	PFTT3-25500100

MicroPulite® Perfect T3 SB Column

Perfect T3 SB is an uncapped C18 column, compatible with 100% aqueous mobile phase. It can enhance the retention of polar compounds (especially basic compounds), due to the presence of free silanol groups on the surface. When the column used in acidic mobile phase conditions, because uncapped prevent hydrolysis of capped reagents, perfect T3 SB has a longer column life and good reproducibility at the low pH.

Stationary Phase	Bonded Phase	Carbon Load	Surface area	End-capped	Pore Size	Particle Size	USP Classification	pH range	Temperature limit
T3 SB		14%	300	No	120Å	3,5, 10µm	L1	1-8	45°C (Low pH) 45°C (High pH)

MicroPulite® Perfect T3 SB Ordering Information

Particle Size: 3 µm	
Size	Part No
30x 2.1 mm	PFTT3SB-032130
50x 2.1 mm	PFTT3SB-052130
100x 2.1 mm	PFTT3SB-102130
150 x 2.1 mm	PFTT3SB-152130
30 x 3.0 mm	PFTT3SB-033030
50 x 3.0 mm	PFTT3SB-053030
100 x 3.0 mm	PFTT3SB-103030
150 x 3.0 mm	PFTT3SB-153030
250 x 3.0 mm	PFTT3SB-253030
30 x 4.6 mm	PFTT3SB-034630
50 x 4.6 mm	PFTT3SB-054630
100 x 4.6 mm	PFTT3SB-104630
150 x 4.6 mm	PFTT3SB-154630
200 x 4.6 mm	PFTT3SB-204630
250 x 4.6 mm	PFTT3SB-254630

Particle Size: 5 µm	
Size	Part No
30x 2.1 mm	PFTT3SB-032150
50x 2.1 mm	PFTT3SB-052150
100x 2.1 mm	PFTT3SB-102150
150 x 2.1 mm	PFTT3SB-152150
30 x 3.0 mm	PFTT3SB-033050
50 x 3.0 mm	PFTT3SB-053050
100 x 3.0 mm	PFTT3SB-103050
150 x 3.0 mm	PFTT3SB-153050
250 x 3.0 mm	PFTT3SB-253050
30 x 4.6 mm	PFTT3SB-034650
50 x 4.6 mm	PFTT3SB-054650
100 x 4.6 mm	PFTT3SB-104650
150 x 4.6 mm	PFTT3SB-154650
200 x 4.6 mm	PFTT3SB-204650
250 x 4.6 mm	PFTT3SB-254650

Particle Size: 5 µm	
Size	Part No
150 x 10 mm	PFTT3SB-1510050
250 x 10 mm	PFTT3SB-2510050
150 x 20 mm	PFTT3SB-1520050
250 x 20 mm	PFTT3SB-2520050
150 x 21.2 mm	PFTT3SB-1521250
250 x 21.2 mm	PFTT3SB-2521250
150 x 30 mm	PFTT3SB-1530050
250 x 30 mm	PFTT3SB-2530050
150 x 50 mm	PFTT3SB-1550050
250 x 50 mm	PFTT3SB-2550050

Particle Size: 10 µm	
Size	Part No
150 x 10 mm	PFTT3SB-15100100
250 x 10 mm	PFTT3SB-25100100
150 x 20 mm	PFTT3SB-15200100
250 x 20 mm	PFTT3SB-25200100
150 x 21.2 mm	PFTT3SB-15212100
250 x 21.2 mm	PFTT3SB-25212100
150 x 30 mm	PFTT3SB-15300100
250 x 30 mm	PFTT3SB-25300100
150 x 50 mm	PFTT3SB-15500100
250 x 50 mm	PFTT3SB-25500100

MicroPulite® Perfect Diol Column

Perfect Diol is made of dihydroxypropylsilane-bonded silica particles, it can be used in normal phase and HILIC modes. As normal phase column, Perfect Diol is similar to silica and amido column, and polarity of diol is weaker than silica (stronger than amino). It is suitable for the analysis of peptides, proteins, and polar compounds.

Stationary Phase	Bonded Phase	Carbon Load	Surface area	End-capped	Pore Size	Particle Size	USP Classification	pH range	Temperature limit
Diol		15%	300	Yes	120Å	3,5,10µm	L20	1-8	60°C (Low pH) 60°C (High pH)

MicroPulite® Perfect Diol Ordering Information

Particle Size: 3 µm		Particle Size: 5 µm	
Size	Part No	Size	Part No
30x 2.1 mm	PFTD-032130	30x 2.1 mm	PFTD-032150
50x 2.1 mm	PFTD-052130	50x 2.1 mm	PFTD-052150
100x 2.1 mm	PFTD-102130	100x 2.1 mm	PFTD-102150
150x 2.1 mm	PFTD-152130	150x 2.1 mm	PFTD-152150
30x 3.0 mm	PFTD-033030	30x 3.0 mm	PFTD-033050
50x 3.0 mm	PFTD-053030	50x 3.0 mm	PFTD-053050
100x 3.0 mm	PFTD-103030	100x 3.0 mm	PFTD-103050
150x 3.0 mm	PFTD-153030	150x 3.0 mm	PFTD-153050
250x 3.0 mm	PFTD-253030	250x 3.0 mm	PFTD-253050
30x 4.6 mm	PFTD-034630	30x 4.6 mm	PFTD-034650
50x 4.6 mm	PFTD-054630	50x 4.6 mm	PFTD-054650
100x 4.6 mm	PFTD-104630	100x 4.6 mm	PFTD-104650
150x 4.6 mm	PFTD-154630	150x 4.6 mm	PFTD-154650
200x 4.6 mm	PFTD-204630	200x 4.6 mm	PFTD-204650
250x 4.6 mm	PFTD-254630	250x 4.6 mm	PFTD-254650

Particle Size: 5 µm		Particle Size: 10 µm	
Size	Part No	Size	Part No
150 x 10 mm	PFTD-1510050	150 x 10 mm	PFTD-15100100
250 x 10 mm	PFTD-2510050	250 x 10 mm	PFTD-25100100
150 x 20 mm	PFTD-1520050	150 x 20 mm	PFTD-15200100
250 x 20 mm	PFTD-2520050	250 x 20 mm	PFTD-25200100
150 x 21.2 mm	PFTD-1521250	150 x 21.2 mm	PFTD-15212100
250 x 21.2 mm	PFTD-2521250	250 x 21.2 mm	PFTD-25212100
150 x 30 mm	PFTD-1530050	150 x 30 mm	PFTD-15300100
250 x 30 mm	PFTD-2530050	250 x 30 mm	PFTD-25300100
150 x 50 mm	PFTD-1550050	150 x 50 mm	PFTD-15500100
250 x 50 mm	PFTD-2550050	250 x 50 mm	PFTD-25500100

MicroPulite® Perfect HILIC Column

Perfect HILIC can retain and separate polar compounds in HILIC mode, especially for strongly polar basic compounds; it can also be used as silica column in normal phase.

Stationary Phase	Bonded Phase	Carbon Load	Surface area	End-capped	Pore Size	Particle Size	USP Classification	pH range	Temperature limit
HILIC		-	300	No	120Å	3,5,10µm	L3	1-5	45°C (Low pH) 45°C (High pH)

MicroPulite® Perfect HILIC Ordering Information

Particle Size: 3 µm		Particle Size: 5 µm	
Size	Part No	Size	Part No
30x 2.1 mm	PFTH-032130	30x 2.1 mm	PFTH-032150
50x 2.1 mm	PFTH-052130	50x 2.1 mm	PFTH-052150
100x 2.1 mm	PFTH-102130	100x 2.1 mm	PFTH-102150
150 x 2.1 mm	PFTH-152130	150 x 2.1 mm	PFTH-152150
30 x 3.0 mm	PFTH-033030	30 x 3.0 mm	PFTH-033050
50 x 3.0 mm	PFTH-053030	50 x 3.0 mm	PFTH-053050
100 x 3.0 mm	PFTH-103030	100 x 3.0 mm	PFTH-103050
150 x 3.0 mm	PFTH-153030	150 x 3.0 mm	PFTH-153050
250 x 3.0 mm	PFTH-253030	250 x 3.0 mm	PFTH-253050
30 x 4.6 mm	PFTH-034630	30 x 4.6 mm	PFTH-034650
50 x 4.6 mm	PFTH-054630	50 x 4.6 mm	PFTH-054650
100 x 4.6 mm	PFTH-104630	100 x 4.6 mm	PFTH-104650
150 x 4.6 mm	PFTH-154630	150 x 4.6 mm	PFTH-154650
200 x 4.6 mm	PFTH-204630	200 x 4.6 mm	PFTH-204650
250 x 4.6 mm	PFTH-254630	250 x 4.6 mm	PFTH-254650

Particle Size: 5 µm		Particle Size: 10 µm	
Size	Part No	Size	Part No
150 x 10 mm	PFTH-1510050	150 x 10 mm	PFTH-15100100
250 x 10 mm	PFTH-2510050	250 x 10 mm	PFTH-25100100
150 x 20 mm	PFTH-1520050	150 x 20 mm	PFTH-15200100
250 x 20 mm	PFTH-2520050	250 x 20 mm	PFTH-25200100
150 x 21.2 mm	PFTH-1521250	150 x 21.2 mm	PFTH-15212100
250 x 21.2 mm	PFTH-2521250	250 x 21.2 mm	PFTH-25212100
150 x 30 mm	PFTH-1530050	150 x 30 mm	PFTH-15300100
250 x 30 mm	PFTH-2530050	250 x 30 mm	PFTH-25300100
150 x 50 mm	PFTH-1550050	150 x 50 mm	PFTH-15500100
250 x 50 mm	PFTH-2550050	250 x 50 mm	PFTH-25500100

MicroPulite® HSS T3 Column: Combination of high strength silica and triple bonded

HSS T3 adopt high strength silica microspheres and triple bonded technology, the columns can withstand higher pressure. HSS T3 is suitable for a wide polarity of compounds and compatible with 100% aqueous phase. The columns show good tolerance to acidic conditions and low column bleeding, the unique endcapped technology makes the peak shape more excellent.

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

Stationary Phase	Bonded Phase	Carbon Load	Surface area	End-capped	Pore Size	Particle Size	USP Classification	pH range	Temperature limit
T3		11%	230	Yes	100Å	1.8, 2.5, 3.5µm	L1	1-8	45°C (Low pH) 45°C (High pH)

HSS T3 is also a general-purpose C18, compatible with 100% aqueous phase, and significantly enhances the retention of polar compounds under reverse phase condition. And low-carbon loading design of HSS T3 can reduce the retention of hydrophobic compounds, HSS T3 is suitable for the research of traditional Chinese medicines (TCMs) and Chinese medicines formulas, as well as for the research of metabolomics.

◆ Application Cases

Poria Formulated Granules

Method: Quality Standard for Chinese Medicine Formulated Granules in Guizhou Province (Fourth Batch)

Project: Characteristic chromatogram

Column: MicroPulite® HSS T3 1.8µm 150*2.1mm (Part No.: HST3-152118)

Wavelength: UV 252nm

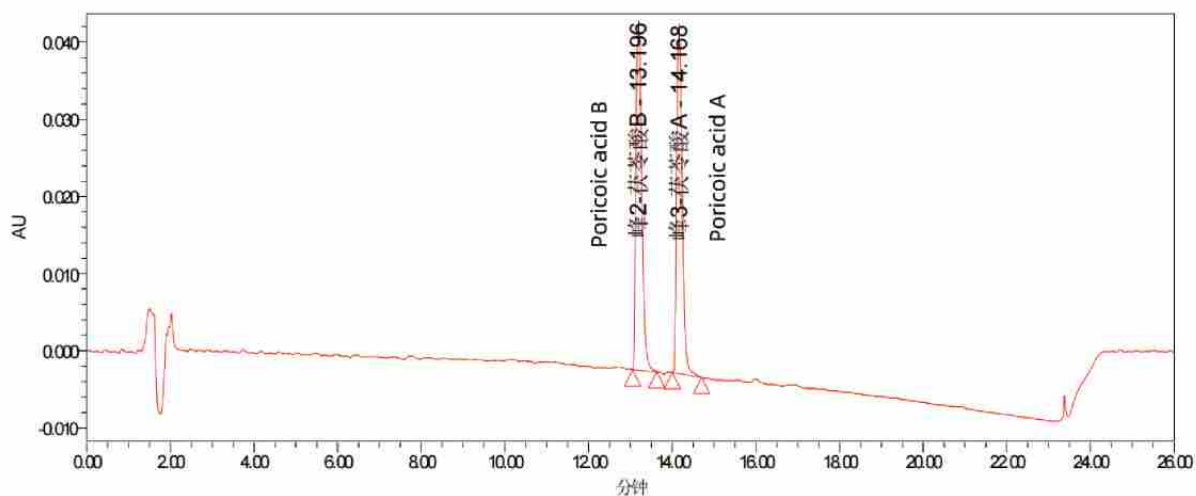
Flow rate: 0.2mL/min

Column temperature: 30°C

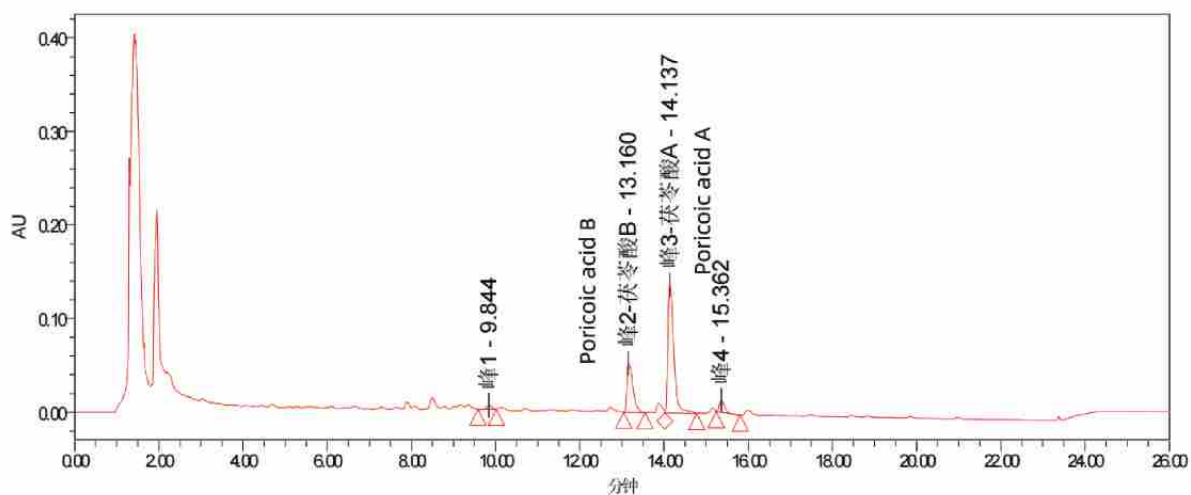
Mobile phase: Phase A: acetonitrile; Phase B: 0.1% formic acid solution

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

Chromatogram:
Control solution



Reference solution



Content determination

Column: MicroPulite® HSS T3 1.8μm 150*2.1mm (Part No: HST3-152118)

Wavelength: UV 252nm

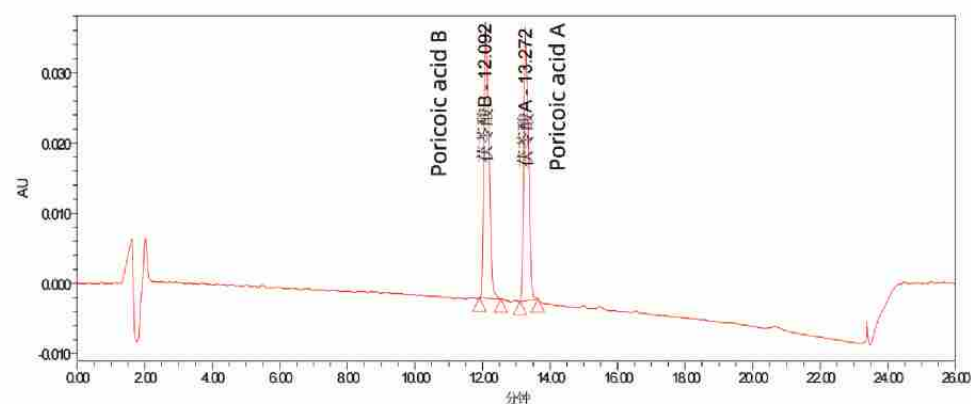
Flow rate: 0.2mL/min

Column temperature: 30°C

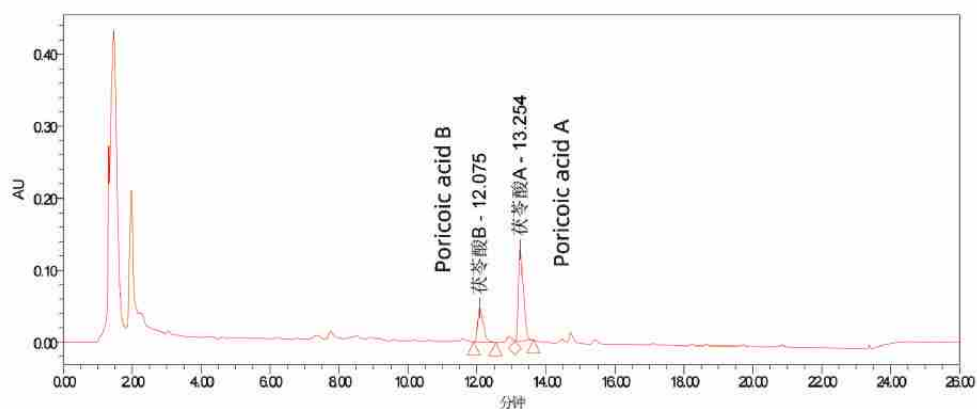
Mobile phase: Phase A: acetonitrile; Phase B: 0.1% formic acid solution

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

Chromatogram:
Control solution



Reference solution

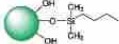
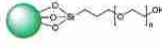


MicroPulite® HSS T3 Ordering Information

Particle Size: 1.8 μ m		Particle Size: 2.5 μ m		Particle Size: 3.5 μ m	
Size	Part No	Size	Part No	Size	Part No
50x 2.1 mm	HST3-052118	30x 2.1 mm	HST3-032125	30x 2.1 mm	HST3-032135
100x 2.1 mm	HST3-102118	50x 2.1 mm	HST3-052125	50x 2.1 mm	HST3-052135
150x 2.1 mm	HST3-152118	100x 2.1 mm	HST3-102125	100x 2.1 mm	HST3-102135
30 x 3.0 mm	HST3-033018	150 x 2.1 mm	HST3-152125	150 x 2.1 mm	HST3-152135
50 x 3.0 mm	HST3-053018	30 x 3.0 mm	HST3-033025	30 x 3.0 mm	HST3-033035
100 x 3.0 mm	HST3-103018	50 x 3.0 mm	HST3-053025	50 x 3.0 mm	HST3-053035
150 x 3.0 mm	HST3-153018	100 x 3.0 mm	HST3-103025	100 x 3.0 mm	HST3-103035
		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	HST3-353035
		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
		200 x 4.6 mm	HST3-204625	200 x 4.6 mm	HST3-204635
		250 x 4.6 mm	HST3-254625	250 x 4.6 mm	HST3-354635

BioPulite® Series: Designed for bioseparation

BioPulite® series adopt the same patented and top-notch porous microsphere syntheses technology as other products, optimized pore structure and leading surface bonded technology provide excellent chromatographic performance for biomolecules. Under ISO 9001 strict quality control, the columns have excellent performance and reproducibility. This series of columns are suitable for analyses of biomolecules, such as monoclonal antibodies (mAbs) and proteins, and is an effective tool in the fields of biopharmaceuticals.

Stationary Phase	Bonded Phase	Carbon Load	Pore Size	Particle Size	USP Classification	pH range	Temperature limit
XP Protein tC18		12%	300Å	1.7,2.5 3.5,5µm	L1	1-12	80°C (Low pH) 60°C (High pH)
XP Protein tC4		8%	300Å	1.7,2.5 3.5,5µm	L26	1-12	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)
Gold Protein C4		1.3%	300Å	3,5µm	L26	2-8	60°C (Low pH) 40°C (High pH)
Gold Protein C18		8.5%	300Å	3,5µm	L1	2-8	60°C (Low pH) 40°C (High pH)
Protein Perfect SEC			125 Å 300 Å	5µm	L33	2-8	45°C (Low pH) 45°C (High pH)

BioPulite® XP Protein tC18 Column

XP Protein tC18 is made of hybrid silica particles, stable in the pH 1-12. The larger pore size of 300Å is suitable for analysis of large molecular compounds such as peptides, proteins, oligonucleotides, and mRNA. Hybrid silica material enhances the resistance to high temperature, high pH, and high concentration buffer salt. It is ideal column of reverse phase analysis macromolecular compounds.

Stationary Phase	Bonded Phase	Carbon Load	Surface area	End-capped	Pore Size	Particle Size	USP Classification	pH range	Temperature limit
XP Protein tC18		12%	100	Yes	300Å	1.7,2.5 3.5,5µm	L1	1-12	80°C (Low pH) 60°C (High pH)

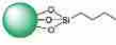
BioPulite® XP Protein tC18 Ordering Information

Particle Size: 1.7 µm		Particle Size: 2.5 µm		Particle Size: 3.5 µm	
Size	Part No	Size	Part No	Size	Part No
50x 2.1 mm	XPtC18-300-052117	30x 2.1 mm	XPtC18-300-032125	30x 2.1 mm	XPtC18-300-032135
100x 2.1 mm	XPtC18-300-102117	50x 2.1 mm	XPtC18-300-052125	50x 2.1 mm	XPtC18-300-052135
150 x 2.1 mm	XPtC18-300-152117	100x 2.1 mm	XPtC18-300-102125	100x 2.1 mm	XPtC18-300-102135
30 x 3.0 mm	XPtC18-300-033017	150 x 2.1 mm	XPtC18-300-152125	150 x 2.1 mm	XPtC18-300-152135
50 x 3.0 mm	XPtC18-300-053017	30 x 3.0 mm	XPtC18-300-033025	30 x 3.0 mm	XPtC18-300-033035
100 x 3.0 mm	XPtC18-300-103017	50 x 3.0 mm	XPtC18-300-053025	50 x 3.0 mm	XPtC18-300-053035
150 x 3.0 mm	XPtC18-300-153017	100 x 3.0 mm	XPtC18-300-103025	100 x 3.0 mm	XPtC18-300-103035
		150 x 3.0 mm	XPtC18-300-153025	150 x 3.0 mm	XPtC18-300-153035
		250 x 3.0 mm	XPtC18-300-253025	250 x 3.0 mm	XPtC18-300-253035
		30 x 4.6 mm	XPtC18-300-034625	30 x 4.6 mm	XPtC18-300-034635
		50 x 4.6 mm	XPtC18-300-054625	50 x 4.6 mm	XPtC18-300-054635
		100 x 4.6 mm	XPtC18-300-104625	100 x 4.6 mm	XPtC18-300-104635
		150 x 4.6 mm	XPtC18-300-154625	150 x 4.6 mm	XPtC18-300-154635
		200 x 4.6 mm	XPtC18-300-204625	200 x 4.6 mm	XPtC18-300-204635
		250 x 4.6 mm	XPtC18-300-254625	250 x 4.6 mm	XPtC18-300-254635

Particle Size: 5 µm	
Size	Part No
30x 2.1 mm	XPtC18-300-032150
50x 2.1 mm	XPtC18-300-052150
100x 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
200 x 4.6 mm	XPtC18-300-204650
250 x 4.6 mm	XPtC18-300-254650

BioPulite® XP Protein tC4 Column

XP Protein tC4 is stable in the pH 1-10, hybrid silica enhance the pH and temperature tolerance of the columns. Xp Protein tC4 is suitable for separating proteins with different sizes, hydrophobicity and isoelectric points.

Stationary Phase	Bonded Phase	Carbon Load	Surface area	End-capped	Pore Size	Particle Size	USP Classification	pH range	Temperature limit
XP Protein tC4		8%	100	Yes	300Å	1.7, 2.5, 3.5, 5µm	L26	1-12	80°C (Low pH) 50°C (High pH)

BioPulite® XP Protein tC4 Ordering Information

Particle Size: 1.7 µm		Particle Size: 2.5 µm		Particle Size: 3.5 µm	
Size	Part No	Size	Part No	Size	Part No
50x 2.1 mm	XPtC4-300-052117	30x 2.1 mm	XPtC4-300-032125	30x 2.1 mm	XPtC4-300-032135
100x 2.1 mm	XPtC4-300-102117	50x 2.1 mm	XPtC4-300-052125	50x 2.1 mm	XPtC4-300-052135
150x 2.1 mm	XPtC4-300-152117	100x 2.1 mm	XPtC4-300-102125	100x 2.1 mm	XPtC4-300-102135
30 x 3.0 mm	XPtC4-300-033017	150 x 2.1 mm	XPtC4-300-152125	150 x 2.1 mm	XPtC4-300-152135
50 x 3.0 mm	XPtC4-300-053017	30 x 3.0 mm	XPtC4-300-033025	30 x 3.0 mm	XPtC4-300-033035
100 x 3.0 mm	XPtC4-300-103017	50 x 3.0 mm	XPtC4-300-053025	50 x 3.0 mm	XPtC4-300-053035
150 x 3.0 mm	XPtC4-300-153017	100 x 3.0 mm	XPtC4-300-103025	100 x 3.0 mm	XPtC4-300-103035
		150 x 3.0 mm	XPtC4-300-153025	150 x 3.0 mm	XPtC4-300-153035
		250 x 3.0 mm	XPtC4-300-253025	250 x 3.0 mm	XPtC4-300-253035
		30 x 4.6 mm	XPtC4-300-034625	30 x 4.6 mm	XPtC4-300-034635
		50 x 4.6 mm	XPtC4-300-054625	50 x 4.6 mm	XPtC4-300-054635
		100 x 4.6 mm	XPtC4-300-104625	100 x 4.6 mm	XPtC4-300-104635
		150 x 4.6 mm	XPtC4-300-154625	150 x 4.6 mm	XPtC4-300-154635
		200 x 4.6 mm	XPtC4-300-204625	200 x 4.6 mm	XPtC4-300-204635
		250 x 4.6 mm	XPtC4-300-254625	250 x 4.6 mm	XPtC4-300-254635

Particle Size: 5 µm	
Size	Part No
30x 2.1 mm	XPtC4-300-032150
50x 2.1 mm	XPtC4-300-052150
100x 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
200 x 4.6 mm	XPtC4-300-204650
250 x 4.6 mm	XPtC4-300-254650

BioPulite® XP Protein RP18 Column

Both XP Protein RP18 and XP Protein RP18 Plus are compatible with 100% aqueous phase, suitable for analysis peptides and proteins with high polarity.

Stationary Phase	Bonded Phase	Carbon Load	Surface area	End-capped	Pore Size	Particle Size	USP Classification	pH range	Temperature limit
XP Protein RP18		12%	100	Yes	300Å	3.5, 5µm	L1	2-11	50°C (Low pH) 45°C (High pH)

BioPulite® XP Protein RP18 Ordering Information

Particle Size: 3.5 µm		Particle Size: 5 µm	
Size	Part No	Size	Part No
30x 2.1 mm	XPR18-300-032135	30x 2.1 mm	XPR18-300-032150
50x 2.1 mm	XPR18-300-052135	50x 2.1 mm	XPR18-300-052150
100x 2.1 mm	XPR18-300-102135	100x 2.1 mm	XPR18-300-102150
150x 2.1 mm	XPR18-300-152135	150x 2.1 mm	XPR18-300-152150
30 x 3.0 mm	XPR18-300-033035	30 x 3.0 mm	XPR18-300-033050
50 x 3.0 mm	XPR18-300-053035	50 x 3.0 mm	XPR18-300-053050
100 x 3.0 mm	XPR18-300-103035	100 x 3.0 mm	XPR18-300-103050
150 x 3.0 mm	XPR18-300-153035	150 x 3.0 mm	XPR18-300-153050
250 x 3.0 mm	XPR18-300-253035	250 x 3.0 mm	XPR18-300-253050
30 x 4.6 mm	XPR18-300-034635	30 x 4.6 mm	XPR18-300-034650
50 x 4.6 mm	XPR18-300-054635	50 x 4.6 mm	XPR18-300-054650
100 x 4.6 mm	XPR18-300-104635	100 x 4.6 mm	XPR18-300-104650
150 x 4.6 mm	XPR18-300-154635	150 x 4.6 mm	XPR18-300-154650
200 x 4.6 mm	XPR18-300-204635	200 x 4.6 mm	XPR18-300-204650
250 x 4.6 mm	XPR18-300-254635	250 x 4.6 mm	XPR18-300-254650

BioPulite® XP Protein RP18 Plus Column

Both XP Protein RP18 and XP Protein RP18 Plus are compatible with 100% aqueous phase, suitable for analysis peptides and proteins with high polarity.

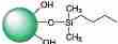
Stationary Phase	Bonded Phase	Carbon Load	Surface area	End-capped	Pore Size	Particle Size	USP Classification	pH range	Temperature limit
XP Protein RP18 Plus		17%	100	Yes	300Å	3.5,5µm	L1	2-11	50°C (Low pH) 45°C (High pH)

BioPulite® XP Protein RP18 Plus Ordering Information

Particle Size: 3.5 µm		Particle Size: 5 µm	
Size	Part No	Size	Part No
30x 2.1 mm	XPR18P-300-032135	30x 2.1 mm	XPR18P-300-032150
50x 2.1 mm	XPR18P-300-052135	50x 2.1 mm	XPR18P-300-052150
100x 2.1 mm	XPR18P-300-102135	100x 2.1 mm	XPR18P-300-102150
150 x 2.1 mm	XPR18P-300-152135	150 x 2.1 mm	XPR18P-300-152150
30 x 3.0 mm	XPR18P-300-033035	30 x 3.0 mm	XPR18P-300-033050
50 x 3.0 mm	XPR18P-300-053035	50 x 3.0 mm	XPR18P-300-053050
100 x 3.0 mm	XPR18P-300-103035	100 x 3.0 mm	XPR18P-300-103050
150 x 3.0 mm	XPR18P-300-153035	150 x 3.0 mm	XPR18P-300-153050
250 x 3.0 mm	XPR18P-300-253035	250 x 3.0 mm	XPR18P-300-253050
30 x 4.6 mm	XPR18P-300-034635	30 x 4.6 mm	XPR18P-300-034650
50 x 4.6 mm	XPR18P-300-054635	50 x 4.6 mm	XPR18P-300-054650
100 x 4.6 mm	XPR18P-300-104635	100 x 4.6 mm	XPR18P-300-104650
150 x 4.6 mm	XPR18P-300-154635	150 x 4.6 mm	XPR18P-300-154650
200 x 4.6 mm	XPR18P-300-204635	200 x 4.6 mm	XPR18P-300-204650
250 x 4.6 mm	XPR18P-300-254635	250 x 4.6 mm	XPR18P-300-254650

BioPulite® Gold Protein C4 Column

As high-purity silica ,Gold protein C4 column is mainly used for protein separation, it is cost-effective and suitable for biomacromolecule analysis.

Stationary Phase	Bonded Phase	Carbon Load	Surface area	End-capped	Pore Size	Particle Size	USP Classification	pH range	Temperature limit
Gold Protein C4		1.3%	100	Yes	300Å	3,5µm	L26	2-8	60°C (Low pH) 40°C (High pH)

BioPulite® Gold Protein C4 Ordering Information

Particle Size: 3 µm		Particle Size: 5 µm	
Size	Part No	Size	Part No
30x 2.1 mm	GDC4-300-032130	30x 2.1 mm	GDC4-300-032150
50x 2.1 mm	GDC4-300-052130	50x 2.1 mm	GDC4-300-052150
100x 2.1 mm	GDC4-300-102130	100x 2.1 mm	GDC4-300-102150
150 x 2.1 mm	GDC4-300-152130	150 x 2.1 mm	GDC4-300-152150
30 x 3.0 mm	GDC4-300-033030	30 x 3.0 mm	GDC4-300-033050
50 x 3.0 mm	GDC4-300-053030	50 x 3.0 mm	GDC4-300-053050
100 x 3.0 mm	GDC4-300-103030	100 x 3.0 mm	GDC4-300-103050
150 x 3.0 mm	GDC4-300-153030	150 x 3.0 mm	GDC4-300-153050
250 x 3.0 mm	GDC4-300-253030	250 x 3.0 mm	GDC4-300-253050
30 x 4.6 mm	GDC4-300-034630	30 x 4.6 mm	GDC4-300-034650
50 x 4.6 mm	GDC4-300-054630	50 x 4.6 mm	GDC4-300-054650
100 x 4.6 mm	GDC4-300-104630	100 x 4.6 mm	GDC4-300-104650
150 x 4.6 mm	GDC4-300-154630	150 x 4.6 mm	GDC4-300-154650
200 x 4.6 mm	GDC4-300-204630	200 x 4.6 mm	GDC4-300-204650
250 x 4.6 mm	GDC4-300-254630	250 x 4.6 mm	GDC4-300-254650

BioPulite® Gold Protein C18 Column

Gold Protein c18 is made of high purity silica, stable in pH 2-8, and 300Å pore size is suitable for large molecular weight compounds, so it is a cost-effective choice for biomolecule analysis.

Stationary Phase	Bonded Phase	Carbon Load	Surface area	End-capped	Pore Size	Particle Size	USP Classification	pH range	Temperature limit
Gold Protein C18		8.5%	100	Yes	300Å	5µm	L1	2-8	60°C (Low pH) 40°C (High pH)

◆ Application Cases

Determination of related substances of salmon calcitonin

Method: Pharmacopoeia of the People's Republic of China 2020

Column: MicroPulite® Gold C18 300Å 5µm 250*4.6mm (Part No: GDC18-300-254650)

Wavelength: UV 220nm

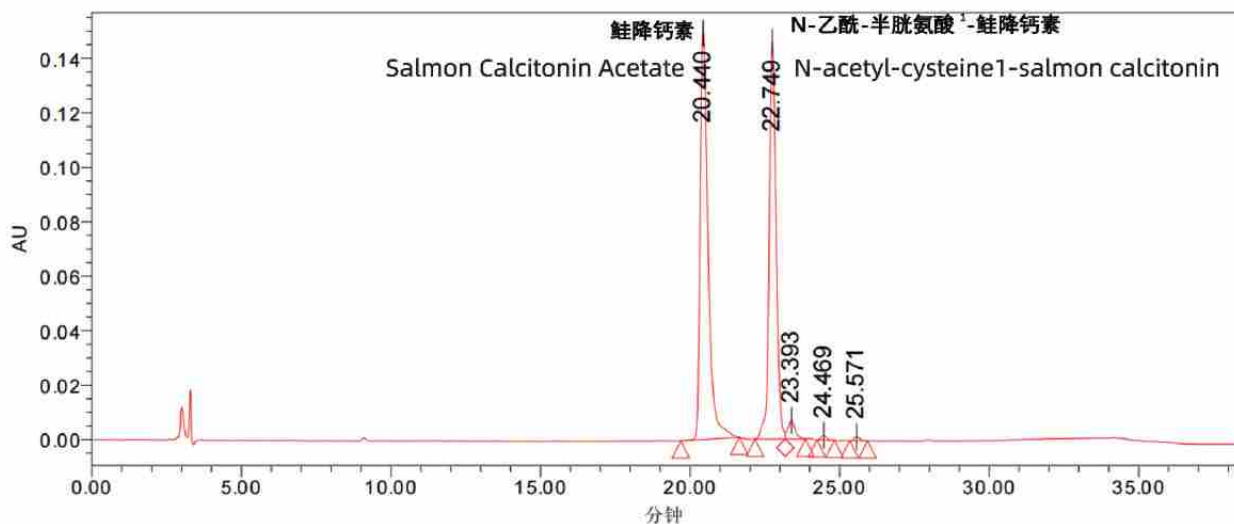
Flow rate: 1.0mL/min

Column temperature: 40°C

Mobile phase: Phase A: 0.02mol/L tetramethylammonium hydroxide solution (pH adjusted to 2.5 with phosphoric acid)-acetonitrile=(9:1); Phase B: 0.02mol/L tetramethylammonium hydroxide solution (pH adjusted to 2.5 with phosphoric acid)-acetonitrile=(2:3)

T/min	A%	B%
0	72	28
30	48	52
32	72	28
55	72	28

Chromatogram:



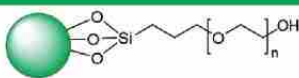
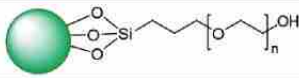
BioPulite® Gold Protein C18 Ordering Information

Particle Size: 3 µm	
Size	Part No
30x 2.1 mm	GDC18-300-032130
50x 2.1 mm	GDC18-300-052130
100x 2.1 mm	GDC18-300-102130
150 x 2.1 mm	GDC18-300-152130
30 x 3.0 mm	GDC18-300-033030
50 x 3.0 mm	GDC18-300-053030
100 x 3.0 mm	GDC18-300-103030
150 x 3.0 mm	GDC18-300-153030
250 x 3.0 mm	GDC18-300-253030
30 x 4.6 mm	GDC18-300-034630
50 x 4.6 mm	GDC18-300-054630
100 x 4.6 mm	GDC18-300-104630
150 x 4.6 mm	GDC18-300-154630
200 x 4.6 mm	GDC18-300-204630
250 x 4.6 mm	GDC18-300-254630

Particle Size: 5 µm	
Size	Part No
30x 2.1 mm	GDC18-300-032150
50x 2.1 mm	GDC18-300-052150
100x 2.1 mm	GDC18-300-102150
150 x 2.1 mm	GDC18-300-152150
30 x 3.0 mm	GDC18-300-033050
50 x 3.0 mm	GDC18-300-053050
100 x 3.0 mm	GDC18-300-103050
150 x 3.0 mm	GDC18-300-153050
250 x 3.0 mm	GDC18-300-253050
30 x 4.6 mm	GDC18-300-034650
50 x 4.6 mm	GDC18-300-054650
100 x 4.6 mm	GDC18-300-104650
150 x 4.6 mm	GDC18-300-154650
200 x 4.6 mm	GDC18-300-204650
250 x 4.6 mm	GDC18-300-254650

BioPulite® Protein Perfect SEC

Protein Perfect SEC is a pure silica based Size-Exclusion Chromatography(SEC) Column. The surface of stationary phase is modified with hydrophilic polymers bonded to the silica gel, enabling effective separation of biomacromolecules, including proteins, peptides, and oligonucleotides. Protein Perfect SEC is available with pore sizes of 125 Å and 300 Å, making it suitable for the analysis of biomacromolecules with diverse molecular weights.

Stationary Phase	Bonded Phase	Carbon Load	Pore Size	End-capped	Pore Size	Particle Size	USP Classification	pH range	Temperature limit
Protein Perfect SEC			300	No	125 Å	5µm	L33	2-8	45°C (Low pH)
Protein Perfect SEC			100	No	300 Å	5µm	L33	2-8	45°C (High pH)

Stationary Phase	Protein Molecular Weight Range	Water-soluble Polymer Molecular Weight Range
Protein Perfect SEC 125	500~150, 000	500~25, 000
Protein Perfect SEC 300	5000~1, 250, 000	1000~100, 000

BioPulite® Protein Perfect SEC Ordering Information

Particle Size: 5 µm	
Size	Part No
250*4.6mm	PFTSEC-125-254650
300*7.8mm	PFTSEC-125-307850

Particle Size: 5 µm	
Size	Part No
250*4.6mm	PFTSEC-300-254650
300*7.8mm	PFTSEC-300-307850

MicroPulite® Peptide Series: Designed for peptide separation

The MicroPulite® Peptide series is used for the separation and analysis of peptides in reverse phase . XP tC18 and PHS XP tC18 are based on hybrid silica particles, triple-bonded modification and a unique double endcapped technology, which provides better tolerance to high pH and high temperature, sharper and superior peaks . HSS T3 is made of high strength silica , can enhance retention of polar peptide .

- Excellent peak shape and performance ,due to hybrid, triple-bonded and endcapped technology
- Different selectivity ,meet the needs of separation various properties peptides
- Flexibility,various specifications to meet HPLC/UHPLC/UPLC requirements
- Good reproducibility,quality control strictly, stable from batch to batch

Stationary Phase	Bonded Phase	Carbon Load	Pore Size	Particle Size	USP Classification	pH range	Temperature limit
Peptide XP	tC18	18%	130Å	Yes	1.7、 2.5、 3.5、 5µm	L1	1-12
Peptide PHS XP	tC18	15%	130Å	Yes	1.7、 2.5、 3.5、 5µm	L1	1-11
Peptide HSS	T3	11%	100Å	Yes	1.8、 2.5、 3.5、 5µm	L1	1-8

◆ Application Cases

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

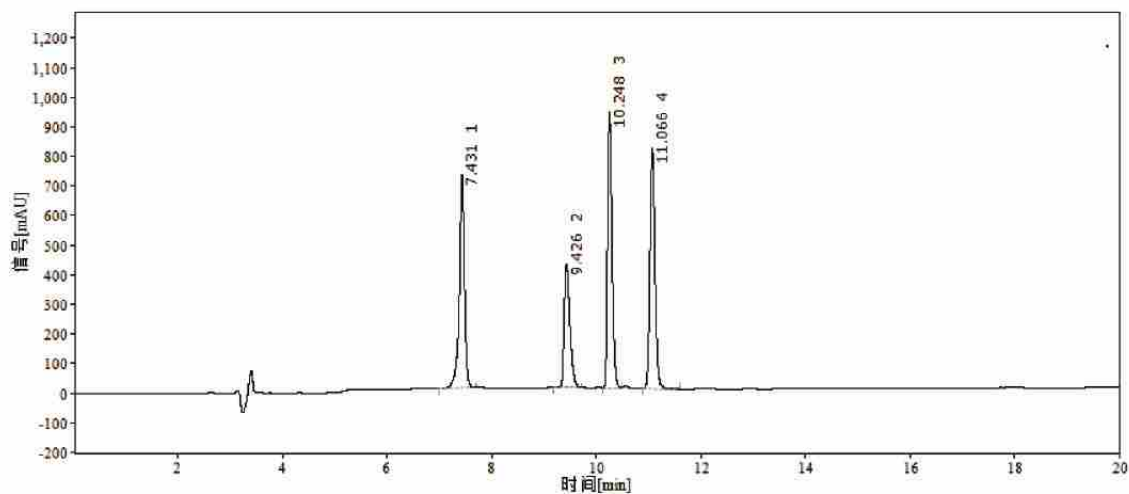
Column

MicroPulite® Peptide XP tC18 4.6*250mm

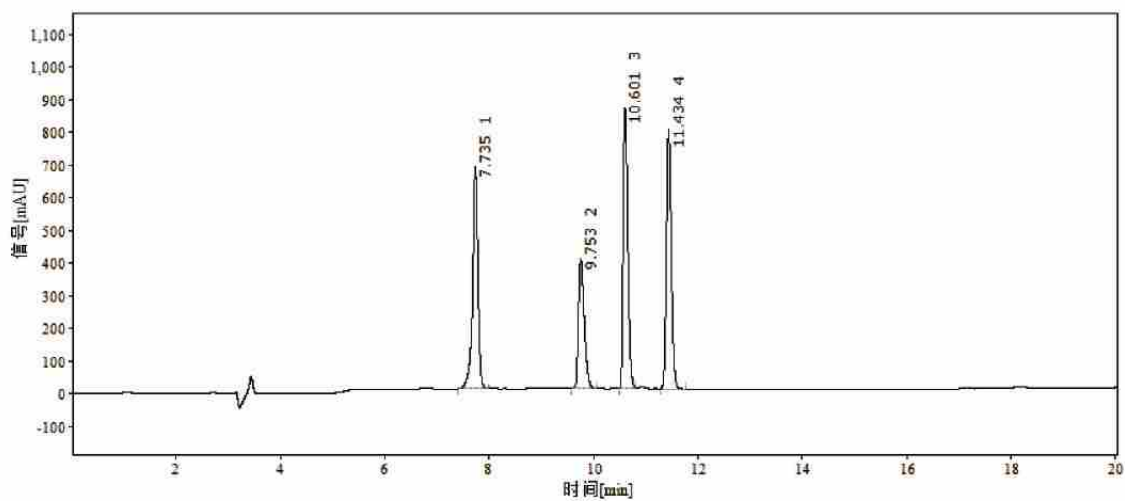
MicroPulite® Peptide HSS T3 4.6*250mm

MicroPulite® Peptide PHS XP tC18 4.6*250mm

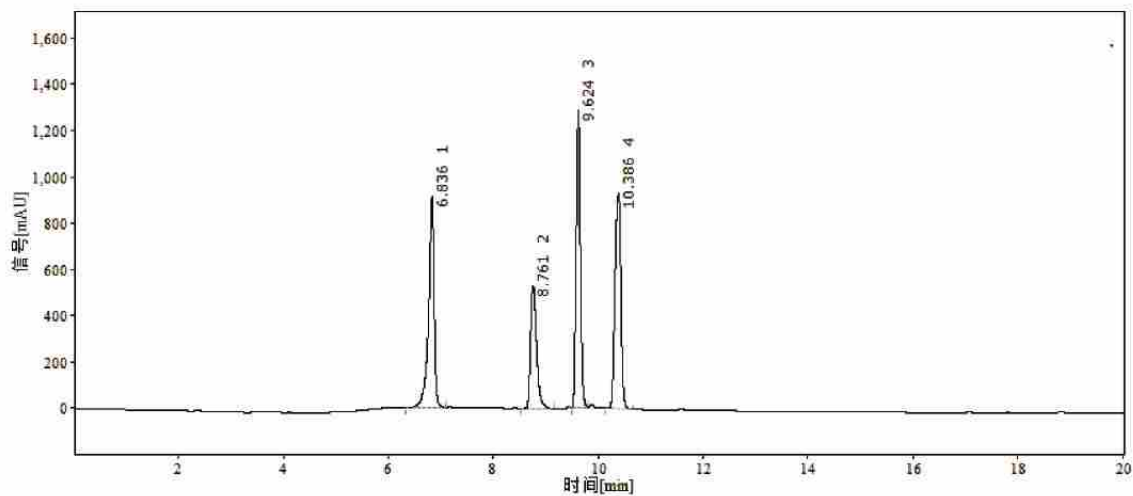
Chromatogram:



MicroPulite® Peptide XP tC18 Mixed standard



MicroPulite® Peptide HSS T3 Mixed standard



MicroPulite® Peptide PHS XP tC18 Mixed standard

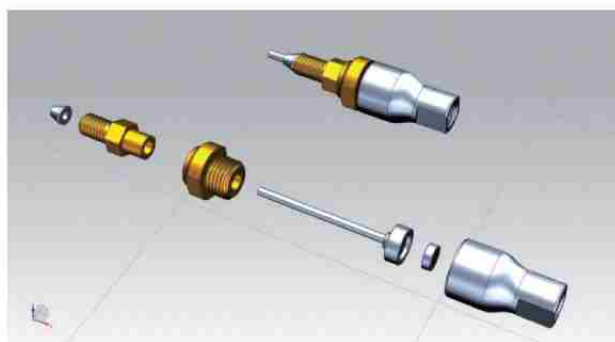
Guard column and in-line filter

Installing an in-line filter or guard column at the front analytical column is crucial for minimizing system downtime and improving column lifetime. The in-line filter contains a frit with specific pore size, which effectively intercepts particulate impurities in the mobile phase and samples that are larger than the frit's pore size. The guard column contains packing material identical to the analytical column, which helps reduce contamination of the column inlet by samples or mobile phase, thereby prolonging the service lifetime of the analytical column.

Specifications	Recommended inner diameter of column
2.1*4mm	2.1mm
3*4mm	3mm
4.6*10mm	3.9mm/4.6mm
10*10mm	10mm
19*10mm	20/21.2/30mm

In-line Filter

The in-line filter removes particulate matter from samples or mobile phase through physical filtration, protecting the column, pump, and tube from blockage. WePure's in-line filter is designed for UPLC systems, it is made of stainless steel and it can pressures up to 18,000 psi.



If the following situation occur, such as rapid column pressure increase, peak tailing, or peak split, Please remove the column and test the in-line filter's pressure to determine if the filter is the source of high pressure. If the filter pressure is elevated, it indicates potential frit blockage, please replace the frit.

In-line Filter	Part No	Description
	OF-21	Wechromlite On-line Filter Holder for UPLC
	OFSP-0205	Wechromlite On-line Filter Replaceable sieve plate (0.2μm)5pk
	OFSP-0210	Wechromlite On-line Filter Replaceable sieve plate (0.2μm)10pk

Direct-Connect Guard Column

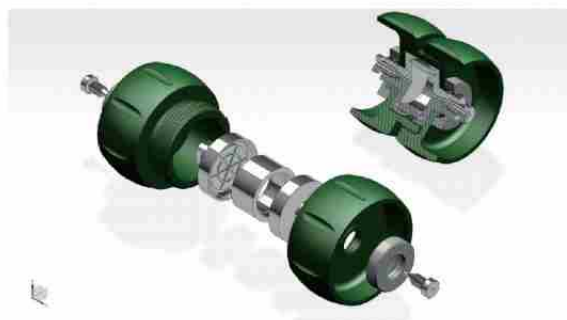
The direct-connect guard column can be directly connected to HPLC/UHPLC/UPLC analytical columns without additional tube connections, offering minimal dead volume and ease of use. It consists of two components: guard column holder and cartridge. The holder is made of stainless steel, compatible with LC instruments from various manufacturers. The guard cartridge needs to be replaced regularly, and it is recommended the packing material of guard column be consistent with analytical column. The guard column holder and cartridge should be used as a matched set.

Guard column Part No	Column inner diameter	Guard column specifications	Operating Pressure
G21	2.1mm	2.1*4mm	18000psi
G30	3mm	3*4mm	9000psi
G46	4.6/3.9mm	4.6*10mm	6000psi



Semi-Preparative Guard Column

The preparative guard column needs fits and tubes to connect with the column. WePure's guard column is designed for semi-preparative columns, easy to install and has reliable performance. It is recommended the cartridge use the same packing material as semi-preparative column. Additionally, guard cartridges of different specifications require correspondingly matched guard column holders.



Guard column Part No	Column inner diameter	Guard column specifications	Operating Pressure
G100	10mm	10*10mm	6000psi
G190	19mm	19*10mm	6000psi

HPLC Guard Column

- Extend the column lifetime
- No change of column performances
- Easy to use

Description	Specifications	Back pressure	Efficiency	Peak Asym
MicroPulite® XP tC18	4.6*250 mm, 5μm	6.7MPa (Use Guard Column)	102333.67	1.09
		6.5MPa (nonuse Guard Column)	96362.56	1.10

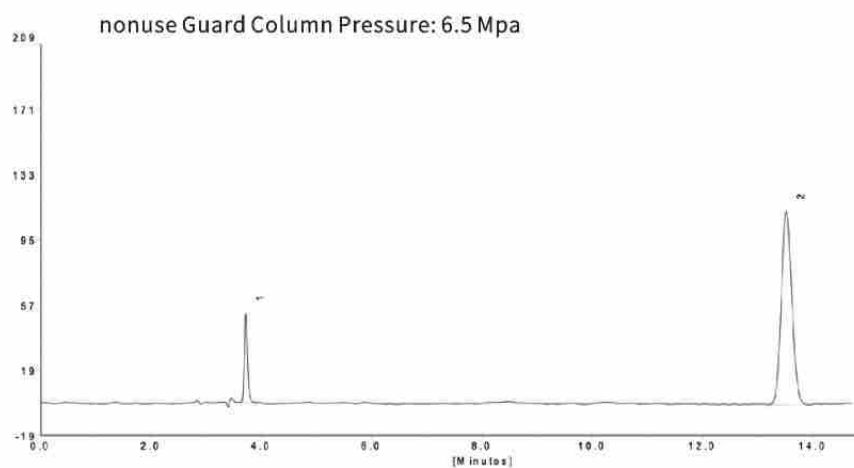
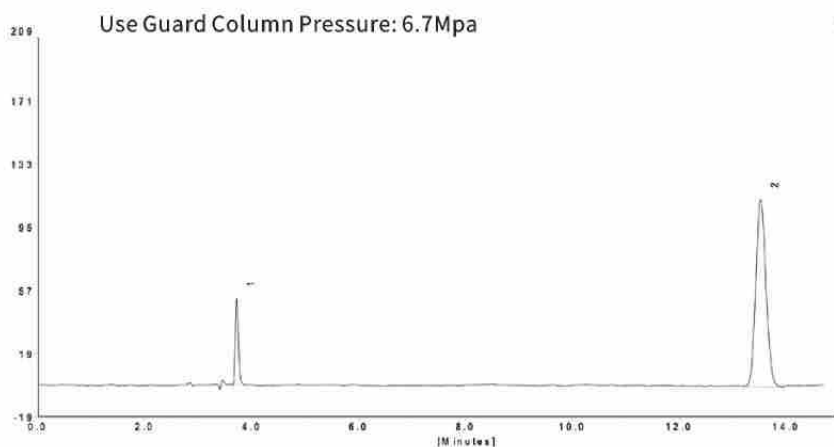
Chromatographic conditions

Mobile phase : A: 0.1% TFA water; B: 0.1% TFA acetonitrile

Flow: 0.8mL/min

Temperature: 25°C

Wavelength: 254 nm



Ordering Information

Product	pH	Packing Type	Particle Size (μm)	Specification (mm)	Part No
WeChromlite® Series Guard Cartridge	1-12	XPtC18 Analytical Guard column	1.7	2.1*4	GC-XPtC18-214017-3P
				3.0*4	GC-XPtC18-304017-3P
			2.5	2.1*4	GC-XPtC18-214025-3P
				3.0*4	GC-XPtC18-304025-3P
				4.6*10	GC-XPtC18-4610025-3P
			3	2.1*4	GC-XPtC18-214030-3P
				3.0*4	GC-XPtC18-304030-3P
				4.6*10	GC-XPtC18-4610030-3P
			3.5	2.1*4	GC-XPtC18-214035-3P
				3.0*4	GC-XPtC18-304035-3P
				4.6*10	GC-XPtC18-461035-3P
		XPtC18 Semi prepared Guard column	5	2.1*4	GC-XPtC18-214050-3P
				3.0*4	GC-XPtC18-304050-3P
				4.6*10	GC-XPtC18-4610050-3P
				10*10	GC-XPtC18-10010050-1P
				19*10	GC-XPtC18-19010050-1P
				20*10	GC-XPtC18-20010050-1P
			7	30*10	GC-XPtC18-30010050-1P
				10*10	GC-XPtC18-10010070-1P
				19*10	GC-XPtC18-19010070-1P
				20*10	GC-XPtC18-20010070-1P
			10	30*10	GC-XPtC18-30010070-1P
				10*10	GC-XPtC18-100100100-1P
				19*10	GC-XPtC18-190100100-1P
				20*10	GC-XPtC18-200100100-1P
				30*10	GC-XPtC18-300100100-1P
	2-8	Gold C18 Analytical Guard column	3	2.1*4	GC-GDC18-214030-3P
				3.0*4	GC-GDC18-304030-3P
				4.6*10	GC-GDC18-4610030-3P
			3.5	2.1*4	GC-GDC18-214035-3P
				3.0*4	GC-GDC18-214035-3P
				4.6*10	GC-GDC18-4610035-3P
			5	2.1*4	GC-GDC18-214050-3P
				3.0*4	GC-GDC18-304050-3P
				4.6*10	GC-GDC18-4610050-3P

Product	pH	PackingType	Particle Size (μm)	Specification (mm)	Part No
WeChromlite® Series Guard Cartridge	2-8	Gold C18 Semi prepared Guard column	5	10*10	GC-GDC18-10010050-1P
				19*10	GC-GDC18-19010050-1P
				20*10	GC-GDC18-20010050-1P
				30*10	GC-GDC18-30010050-1P
			7	10*10	GC-GDC18-10010070-1P
				19*10	GC-GDC18-19010070-1P
				20*10	GC-GDC18-20010070-1P
				30*10	GC-GDC18-30010070-1P
			10	10*10	GC-GDC18-100100100-1P
				19*10	GC-GDC18-190100100-1P
				20*10	GC-GDC18-200100100-1P
				30*10	GC-GDC18-300100100-1P

Product	pH	PackingType	Particle Size (μm)	Specification (mm)	Part No
WeChromlite® Series Guard Cartridge	1-8	HSS T3 Analytical Guard column	1.8	2.1*4	GC-HST3-214018-3P
				3.0*4	GC-HST3-304018-3P
			2.5	2.1*4	GC-HST3-214025-3P
				3.0*4	GC-HST3-304025-3P
			3.5	4.6*10	GC-HST3-4610025-3P
				2.1*4	GC-HST3-214035-3P
				3.0*4	GC-HST3-304035-3P
				4.6*10	GC-HST3-4610035-3P
		Perfect T3 Analytical Guard column	3	2.1*4	GC-PFT3-214030-3P
				3.0*4	GC-PFT3-304030-3P
				4.6*10	GC-PFT3-4610030-3P
			5	2.1*4	GC-PFT3-214050-3P
				3.0*4	GC-PFT3-304050-3P
				4.6*10	GC-PFT3-4610050-3P
	1-8		5	10*10	GC-PFT3-10010050-1P
				19*10	GC-PFT3-19010050-1P
				20*10	GC-PFT3-20010050-1P
				30*10	GC-PFT3-30010050-1P
			7	10*10	GC-PFT3-10010070-1P
				19*10	GC-PFT3-19010070-1P
				20*10	GC-PFT3-20010070-1P
				30*10	GC-PFT3-30010070-1P
		Perfect T3 Semi prepared Guard column	10	10*10	GC-PFT3-100100100-1P
				19*10	GC-PFT3-190100100-1P
				20*10	GC-PFT3-200100100-1P
				30*10	GC-PFT3-300100100-1P

Amino Acid Analysis

Amino acids are the basic units of proteins, and amino acid analysis plays a critical role in fields such as pharmaceuticals, clinical diagnostics, food, and environmental sciences. The separation of amino acids is relatively high difficulty and challenge. To enhance analytical sensitivity and selectivity, amino acids are typically derivatized for pre-column or post-column. Current methods for pre-column derivatization of amino acids primarily utilize reagents such as o-phthalaldehyde (OPA), 9-fluorenylmethyl chloroformate (FMOC-Cl), phenyl isothiocyanate (PITC), and 6-aminoquinolyl-N-hydroxysuccinimidyl carbamate (AQC).

◆AQC Reagent Pre-column Derivatization Amino Acid Kit

6-Aminoquinolyl-N-hydroxysuccinimidyl Carbamate (AQC) reacts rapidly with amino acids, and derivatives can be detected by both UV and FLD. The AQC derivatization method for amino acids has become one of the more widely applied derivatization techniques in recent years. The AQC Reagent Kit includes AQC derivatization reagent powder and borate buffer solution, has the following characteristics:

- AQC reagent reacts quickly and easily with primary and secondary amines
- The derivatized product can be directly analyzed by LC instruments
- The derivatized product is stable and can be stored at room temperature for up to one week.
- Excess derivatization reagent reacts slowly with water and does not affect amino acid derivatives.

AQC Kit for Pre-column Derivatization of Amino Acids

A AQC Kit includes a special HPLC or UPLC column for Amino acid and AQC Reagent. The amino acid analysis column has undergone specialized quality control testing to effectively separate the amino acid derivatives produced from the reaction.

◆Application Cases

Analysis of 17 Amino Acids Using the AQC Kit on HPLC

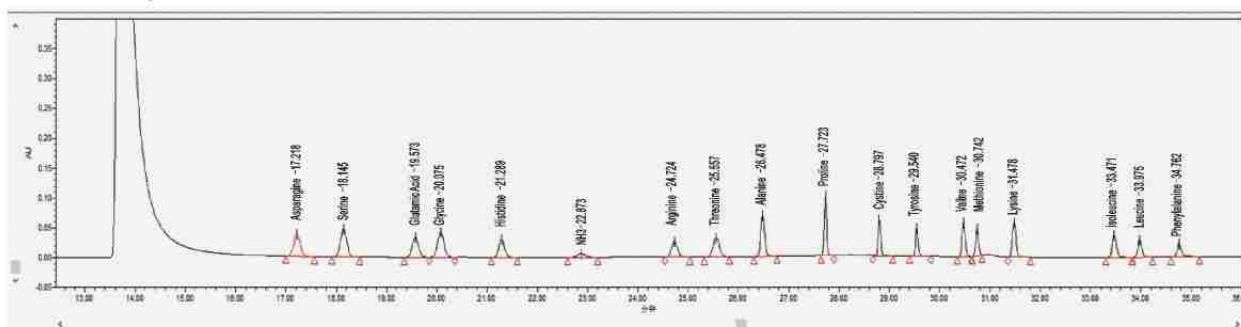
Column: Amino Acid Analysis Column 3.5 μ m 4.6*150mm

Wavelength:UV260

Flow rate:1.2mL/min

Injection volume:10 μ L

Column temperature:37 $^{\circ}$ C



◆ Application Cases

Analysis of 17 Amino Acids Using the AQC Kit on UPLC

Column: Amino Acid Analysis Column 1.7 μ m 2.1*100mm

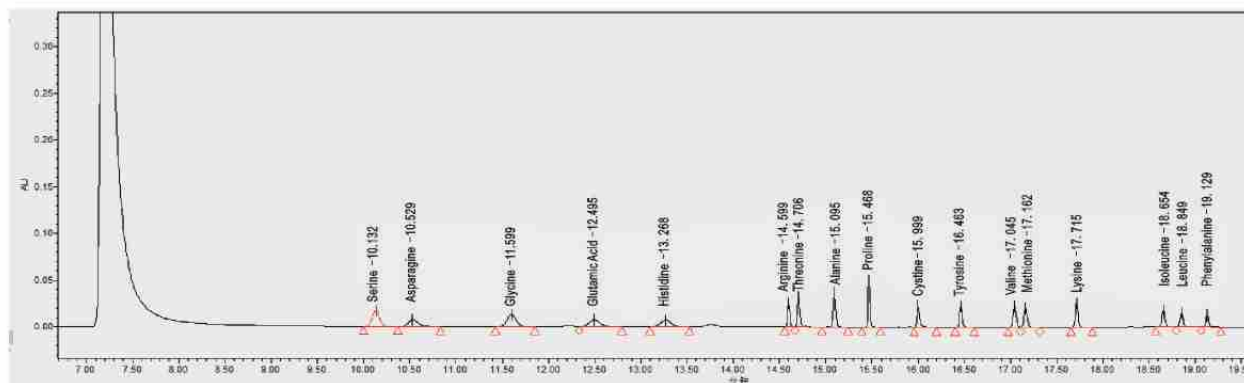
Wavelength: UV260

Flow rate: 0.4mL/min

Injection volume: 1 μ L

Column temperature: 37°C

Chromatogram:



📄 Ordering Information

Product information	Part No.
Upulite® AQC Kit (AQC Pre-column Derivatization Amino Acid HPLC Method Kit)	WEAQCK-001
Upulite® AQC Kit ((AQC Pre-column Derivatization Amino Acid UPLC Method Kit)	WEAQCK-002
Upulite® AQC Reagent	WEAQCR-001
Upulite® SP C18-AA (Amino Acid Analysis Column, 3.5 μ m 4.6*150mm)	SP05-154635
Upulite® SP C18-AA (Amino Acid Analysis Column, 1.7 μ m 2.1*100mm)	SP05-102117

Buffer Range, LC- MS compatibility, and Cutoff wavelength of Common Buffers

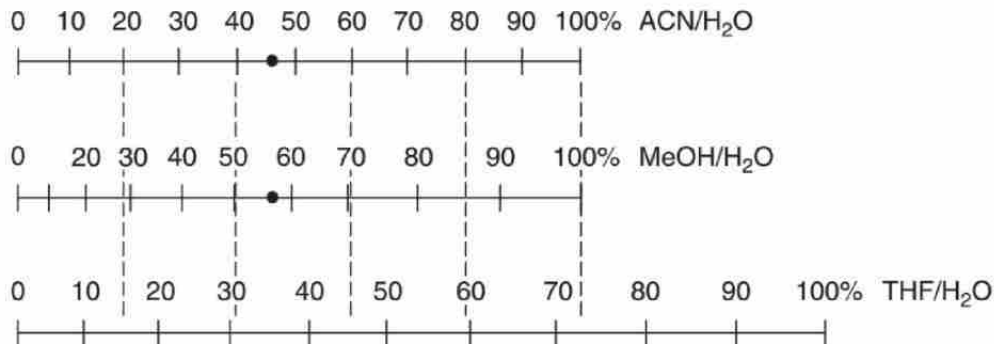
Buffer reagent	pH buffer reagent	LC-MS compatibility	UV cutoff wavelength
Phosphate(pK_1)	1.1-3.1	NO	<200nm
Phosphate(pK_2)	6.2-8.2		
Phosphate(pK_3)	11.3-13.3		
Acetate	3.8-5.8	YES	210nm(10mm)
Citrate(pK_1)	2.1-4.1	NO	230nm(10mm)
Citrate(pK_2)	3.7-5.7		
Citrate(pK_3)	4.4-6.4		
Trifluoroacetic Acid(0.1%)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

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

Immiscibility Mutually dissolvable

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



Common solvent properties

Solvent	Cutoff wavelength(nm) ^a	Refractivity Ri ^b	Viscosity(cP)	Boiling point(°C) ^c	ε (silica) ^d
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	224	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



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