



**WE PURE**  
微纯生物科技

# 色谱产品手册

**CHROMATOGRAPHIC  
PRODUCT MANUAL**

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



微纯生物科技致力于“成为全球分析检测、分离纯化解决方案优秀供应商”，是全球全面掌握液相色谱硅胶填料及树脂填料制备技术为数不多的厂家之一，团队拥有20多年行业经验，积累了丰富的产品应用与方法开发经验。公司拥有从原料单体生产硅胶及树脂微球、国际领先表面键合修饰工艺、分析色谱柱/半制备柱和制备填料生产的完整产业链，为医药制造、生物技术、食品安全、化工生产、环境检测等行业提供高品质、高性价比、稳定供应、快速交付的产品和服务。

公司主要产品包括MicroPulite®分析色谱柱、BioPulite®生物分离液相色谱柱、PrePulite®半制备填料/半制备柱及工业制备色谱填料、Upulite®样品前处理填料/SPE和WeChromlite®保护柱/半制备保护柱。

公司在广州南沙区广东医谷国家级孵化园区有1950平米研发、生产及应用开发基地，微纯生物科技(佛山)子公司拥有5000平米生产基地。公司于2023年12月在广东翁源创新原料药产业园购买40亩M3工业用地自建21000平米生产基地。



广东医谷—“微纯”生产、研发及应用开发中心



佛山云东海—“微纯”生产基地



建设中的“广东微纯生物新材料有限公司”生产基地



# 3个核心技术平台

## ■ 多孔微球核心制备技术平台

可以稳定大规模生产 $1.7\mu\text{m}$ - $100\mu\text{m}$ 高纯硅胶微球、有机-无机结构杂化XP硅胶微球及高强度HSS硅胶微球、无机-无机结构杂化SiZ微球等。

## ■ 国际领先的微球表面键合修饰技术平台

三键C18, 双键C18, 单键C18, 三键C8, 双键C8, 单键C8,  $\text{NH}_2$ , Amide, 己基苯基, 五氟苯基PFP, 二醇基, RP18, RP18 Plus, 带电荷PHS修饰技术, 独特T3键合修饰技术, 混合分析模式键合等技术。

## ■ 高效、稳定、齐全的液相色谱柱及半制备柱装柱技术平台

液相色谱柱覆盖UPLC、UHPLC、HPLC及半制备柱, 拥有稳定、成熟的装柱工艺及检测, 保证产品具有优秀的稳定性和重现性。

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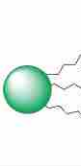
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## 色谱柱参数指南

| 色谱柱系列                 | 固定相             | 键合相                                                                                 | 碳载量  | 比表面积 | 封端  | 孔径 (Å) | 可选粒径            | USP 分类 | pH 范围 | 温度上限                            |
|-----------------------|-----------------|-------------------------------------------------------------------------------------|------|------|-----|--------|-----------------|--------|-------|---------------------------------|
| MicroPulite® Gold     | C18             |    | 18%  | 300  | Yes | 120Å   | 3, 3.5, 5, 10µm | L1     | 2-8   | 60°C (Low pH)<br>40°C (High pH) |
|                       | C8              |    | 12%  | 300  | Yes | 120Å   | 3, 3.5, 5, 10µm | L7     | 2-8   | 60°C (Low pH)<br>40°C (High pH) |
|                       | C4              |    | 3.9% | 300  | Yes | 120Å   | 3, 3.5, 5, 10µm | L26    | 2-8   | 60°C (Low pH)<br>40°C (High pH) |
|                       | RP18            |    | 20%  | 300  | Yes | 120Å   | 3, 3.5, 5, 10µm | L1     | 1-8   | 60°C (Low pH)<br>40°C (High pH) |
|                       | RP18 Plus       |    | 17%  | 300  | Yes | 120Å   | 3, 3.5, 5, 10µm | L1     | 2-8   | 60°C (Low pH)<br>40°C (High pH) |
|                       | RP8 Plus        |  | 15%  | 300  | Yes | 120Å   | 3, 3.5, 5µm     | L7     | 2-8   | 60°C (Low pH)<br>40°C (High pH) |
|                       | RP4 Plus        |  | 3.9% | 300  | Yes | 120Å   | 3, 3.5, 5µm     | L26    | 2-8   | 60°C (Low pH)<br>40°C (High pH) |
|                       | NH <sub>2</sub> |  | 3.8% | 300  | No  | 120Å   | 3, 3.5, 5µm     | L8     | 2-8   | 60°C (Low pH)<br>40°C (High pH) |
|                       | HILIC           |  | -    | 300  | No  | 120Å   | 3, 3.5, 5, 10µm | L3     | 2-7   | 60°C (Low pH)<br>40°C (High pH) |
|                       | Phenyl-Hexyl    |  | 13%  | 300  | Yes | 120Å   | 3, 3.5, 5, 10µm | L11    | 2-8   | 60°C (Low pH)<br>40°C (High pH) |
| MicroPulite® Platinum | PFP             |  | 10%  | 300  | Yes | 120Å   | 3, 3.5, 5, 10µm | L43    | 2-8   | 60°C (Low pH)<br>40°C (High pH) |
|                       | CN              |  | 5%   | 300  | Yes | 120Å   | 5µm             | L10    | 2-8   | 45°C (Low pH)<br>45°C (High pH) |
|                       | C18             | 特有C18                                                                               | 16%  | 320  | Yes | 100Å   | 3, 3.5, 5, 10µm | L1     | 1-8   | 50°C (Low pH)<br>40°C (High pH) |
|                       | C8              | 特有C8                                                                                | 12%  | 320  | Yes | 100Å   | 3, 3.5, 5, 10µm | L7     | 1-8   | 40°C (Low pH)<br>40°C (High pH) |
|                       |                 |                                                                                     |      |      |     |        |                 |        |       |                                 |
|                       |                 |                                                                                     |      |      |     |        |                 |        |       |                                 |
|                       |                 |                                                                                     |      |      |     |        |                 |        |       |                                 |

| 色谱柱系列           | 固定相             | 键合相                                                                                 | 碳载量   | 比表面积 | 封端  | 孔径 (Å) | 可选粒径                       | USP 分类 | pH 范围 | 温度上限                            |
|-----------------|-----------------|-------------------------------------------------------------------------------------|-------|------|-----|--------|----------------------------|--------|-------|---------------------------------|
| MicroPulite® XP | tC18            |    | 18%   | 185  | Yes | 130Å   | 1.7,2.5,3, 3.5, 5, 7, 10µm | L1     | 1-12  | 80°C (Low pH)<br>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)<br>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)<br>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)<br>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)<br>45°C (High pH) |
|                 | NH <sub>2</sub> |   | 9%    | 185  | No  | 130Å   | 3.5, 5µm                   | L8     | 1-9   | 45°C (Low pH)<br>45°C (High pH) |
|                 | T3              |  | 14%   | 185  | Yes | 130Å   | 3.5, 5, 7, 10µm            | L1     | 1-12  | 80°C (Low pH)<br>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)<br>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)<br>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)<br>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)<br>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)<br>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)<br>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)<br>60°C (High pH) |

| 色谱柱系列                | 固定相                  | 键合相                                                                                 | 碳载量        | 比表面积 | 封端     | 孔径 (Å)         | 可选粒径                         | USP 分类     | pH 范围      | 温度上限                            |
|----------------------|----------------------|-------------------------------------------------------------------------------------|------------|------|--------|----------------|------------------------------|------------|------------|---------------------------------|
| MicroPulite® PHSXP   | tC18                 |    | 17%        | 185  | Yes    | 130Å           | 1.7, 2.5, 3, 3.5, 5, 7, 10µm | L1         | 1-11       | 80°C (Low pH)<br>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)<br>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)<br>45°C (High pH) |
| MicroPulite® Perfect | T3                   |    | 14%        | 300  | Yes    | 120Å           | 3, 5, 10µm                   | L1         | 1-8        | 45°C (Low pH)<br>45°C (High pH) |
|                      | T3SB                 |    | 14%        | 300  | No     | 120Å           | 3, 5, 10µm                   | L1         | 1-8        | 45°C (Low pH)<br>45°C (High pH) |
|                      | Diol                 |   | 15%        | 300  | Yes    | 120Å           | 3, 5, 10µm                   | L20        | 1-8        | 60°C (Low pH)<br>60°C (High pH) |
|                      | HILIC                |  | -          | 300  | No     | 120Å           | 3, 5, 10µm                   | L3         | 1-5        | 45°C (Low pH)<br>45°C (High pH) |
| MicroPulite® HSS     | T3                   |  | 11%        | 230  | Yes    | 100Å           | 1.8, 2.5, 3.5µm              | L1         | 1-8        | 45°C (Low pH)<br>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)<br>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)<br>50°C (High pH) |
|                      | XP Protein RP18      |  | 12%        | 100  | Yes    | 300Å           | 3.5, 5µm                     | L1         | 2-11       | 50°C (Low pH)<br>45°C (High pH) |
|                      | XP Protein RP18 Plus |  | 17%        | 100  | Yes    | 300Å           | 3.5, 5µm                     | L1         | 2-11       | 50°C (Low pH)<br>45°C (High pH) |
|                      | Gold Protein C4      |  | 1.3%       | 100  | Yes    | 300Å           | 3, 5µm                       | L26        | 2-8        | 60°C (Low pH)<br>40°C (High pH) |
|                      | Gold Protein C18     |  | 8.5%       | 100  | Yes    | 300Å           | 3, 5µm                       | L1         | 2-8        | 60°C (Low pH)<br>40°C (High pH) |
|                      | Protein Perfect SEC  |  | 300<br>100 |      | 否<br>否 | 125 Å<br>300 Å | 5µm<br>5µm                   | L33<br>L33 | 2-8<br>2-8 | 45°C (Low pH)<br>45°C (High pH) |

\*红色字体型号表示与100%水相兼容



# MicroPulite® Gold色谱柱: 高性价比色谱柱的首选

Gold系列色谱柱选用高纯度硅胶颗粒为填料,在ISO 9001严格质量控制体系生产,确保获得优秀峰型的同时拥有优秀的批次稳定性和重现性。Gold系列色谱柱提供C18、C8、氨基等多种键合相,是日常检测的高性价比色谱柱的首选。

- 峰形尖锐、超高的柱效
- 通用型色谱柱,具有良好的柱间和批间重现性
- pH 耐受范围:2—8
- 普遍应用于化药、中药、环境和食品安全检测领域

| 固定相                  | 键合相                                                                                 | 碳载量  | 孔径   | 可选粒径            | USP分类 | pH范围 | 温度上限                            |
|----------------------|-------------------------------------------------------------------------------------|------|------|-----------------|-------|------|---------------------------------|
| Gold C18             |    | 18%  | 120Å | 3, 3.5, 5, 10µm | L1    | 2-8  | 60°C (Low pH)<br>40°C (High pH) |
| Gold C8              |   | 12%  | 120Å | 3, 3.5, 5, 10µm | L7    | 2-8  | 60°C (Low pH)<br>40°C (High pH) |
| Gold C4              |  | 3.9% | 120Å | 3, 3.5, 5, 10µm | L26   | 2-8  | 60°C (Low pH)<br>40°C (High pH) |
| Gold RP18            |  | 20%  | 120Å | 3, 3.5, 5, 10µm | L1    | 1-8  | 60°C (Low pH)<br>40°C (High pH) |
| Gold RP18 Plus       |  | 17%  | 120Å | 3, 3.5, 5, 10µm | L1    | 2-8  | 60°C (Low pH)<br>40°C (High pH) |
| Gold RP8 Plus        |  | 15%  | 120Å | 3, 3.5, 5µm     | L7    | 2-8  | 60°C (Low pH)<br>40°C (High pH) |
| Gold RP4 Plus        |  | 3.9% | 120Å | 3, 3.5, 5µm     | L26   | 2-8  | 60°C (Low pH)<br>40°C (High pH) |
| Gold NH <sub>2</sub> |  | 3.8% | 120Å | 3, 3.5, 5µm     | L8    | 2-8  | 60°C (Low pH)<br>40°C (High pH) |
| Gold HILIC           |  | -    | 120Å | 3, 3.5, 5, 10µm | L3    | 2-7  | 60°C (Low pH)<br>40°C (High pH) |
| Gold Phenyl-Hexyl    |  | 13%  | 120Å | 3, 3.5, 5, 10µm | L11   | 2-8  | 60°C (Low pH)<br>40°C (High pH) |
| Gold PFP             |  | 10%  | 120Å | 3, 3.5, 5, 10µm | L43   | 2-8  | 60°C (Low pH)<br>40°C (High pH) |
| Gold CN              |  | 5%   | 120Å | 5µm             | L10   | 2-8  | 45°C (Low pH)<br>45°C (High pH) |

## MicroPulite® Gold C18:超高性价比的通用型C18柱

Gold C18作为通用型C18柱,除了能提供对称的峰形、优秀的分离度和良好的批次稳定性,还拥有超高的性价比,能满足制药、食品、环境、化工等不同领域的日常分析需求。

| 固定相 | 键合相                                                                               | 碳载量 | 比表面积 | 封端  | 孔径   | 可选粒径            | USP分类 | pH范围 | 温度上限                            |
|-----|-----------------------------------------------------------------------------------|-----|------|-----|------|-----------------|-------|------|---------------------------------|
| C18 |  | 18% | 300  | Yes | 120Å | 3, 3.5, 5, 10µm | L1    | 2-8  | 60°C (Low pH)<br>40°C (High pH) |

### ◆ 特点

- 十八烷基硅烷键合硅胶色谱柱
- 高性价比的C18柱,通用性强
- 良好的批间稳定性和重现性
- 碱性化合物峰形更优异,应用于制药、食品、环境等领域

### ◆ 应用案例

#### 醋酸泼尼松有关物质

方法来源:《中国药典》

色谱柱: MicroPulite® Gold C18 5µm 250\*4.6mm

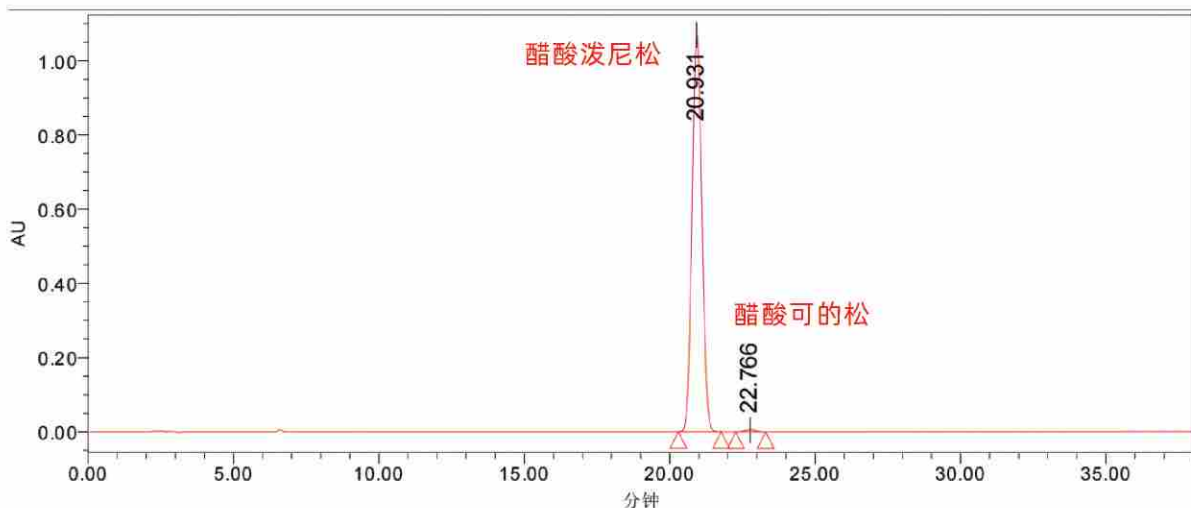
检测波长:UV 240nm

流速:1.0mL/min

柱温:35°C

流动相:乙腈-水=(33:67)

色谱图:



## ◆应用案例

### 枇杷叶含量测定(齐墩果酸、熊果酸)

方法来源:《中国药典》

色谱柱:MicroPulite® Gold C18 5μm 250\*4.6mm

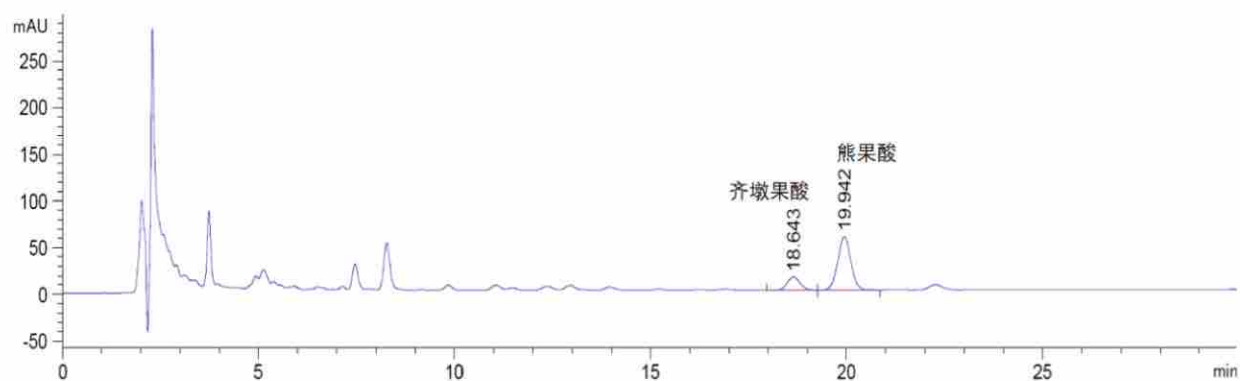
检测波长:UV 210nm

流速:1.0mL/min

柱温:30℃

流动相:乙腈-甲醇-0.5%醋酸铵溶液=(67:12:21)

色谱图:



## ◆应用案例

### 乙二胺四乙酸二钠含量测定

方法来源:《GB 5009.278-2016》

色谱柱:MicroPulite® Gold C18 5 $\mu$ m 250\*4.6mm

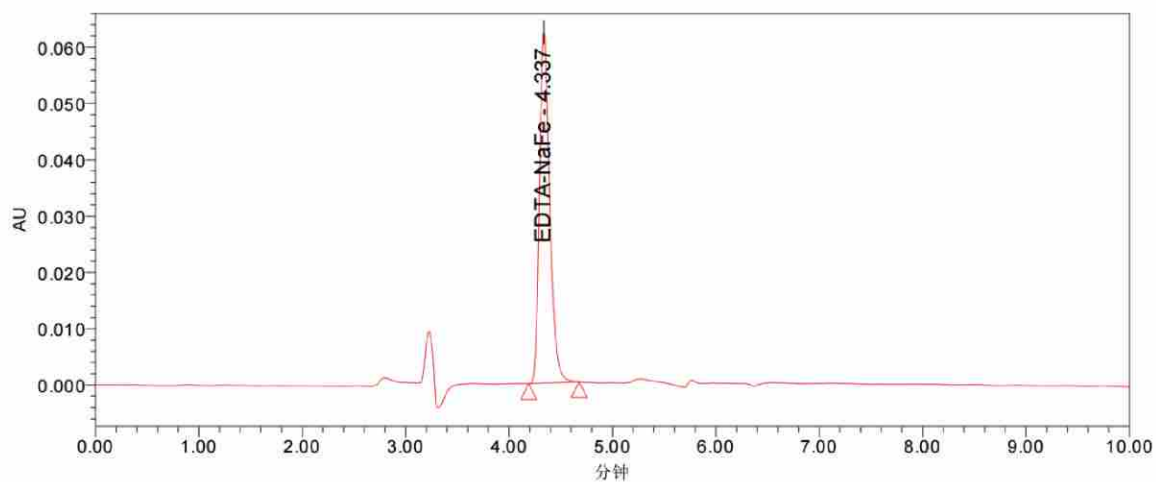
检测波长:UV 254nm

流速:0.8mL/min

柱温:35°C

流动相:甲醇-[四丁基溴化铵-乙酸钠混合溶液(pH4.0)]= (15:85)

色谱图:



### 28%吡蚜.呋虫胺含量测定

方法来源:企标

色谱柱:MicroPulite® Gold C18 5 $\mu$ m 250\*4.6mm

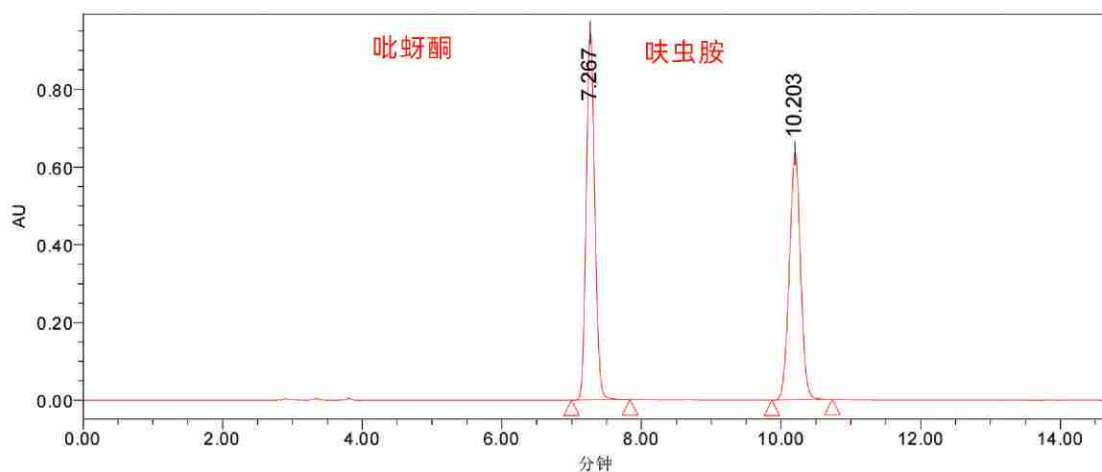
检测波长:UV 260nm

流速:1.0mL/min

柱温:30°C

流动相:乙腈-1.0g/L磷酸二氢钾溶液=(10:90)

色谱图:



## MicroPulite® Gold C18 订购信息

| 可选粒径: 3 μm |              |
|------------|--------------|
| 规格         | 货号 (P/N)     |
| 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 |

| 可选粒径: 3.5 μm |              |
|--------------|--------------|
| 规格           | 货号 (P/N)     |
| 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 |

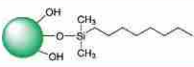
| 可选粒径: 5 μm |              |
|------------|--------------|
| 规格         | 货号 (P/N)     |
| 30x2.1mm   | GDC18-032150 |
| 50x2.1mm   | GDC18-052150 |
| 100x2.1mm  | GDC18-102150 |
| 150x2.1mm  | GDC18-152150 |
| 30x3.0mm   | GDC18-033050 |
| 50x3.0mm   | GDC18-053050 |
| 100x3.0mm  | GDC18-103050 |
| 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 |

| 可选粒径: 5 μm |               |
|------------|---------------|
| 规格         | 货号 (P/N)      |
| 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 |

| 可选粒径: 10 μm |                |
|-------------|----------------|
| 规格          | 货号 (P/N)       |
| 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 色谱柱

Gold C8的保留能力与C18相比偏弱,强疏水性化合物的保留时间会有所提前,因此比C18柱有更高的分析效率,也提供了与C18不同的选择性。

| 固定相 | 键合相                                                                               | 碳载量 | 比表面积 | 封端  | 孔径   | 可选粒径            | USP分类 | pH范围 | 温度上限                            |
|-----|-----------------------------------------------------------------------------------|-----|------|-----|------|-----------------|-------|------|---------------------------------|
| C8  |  | 12% | 300  | Yes | 120Å | 3, 3.5, 5, 10µm | L7    | 2-8  | 60°C (Low pH)<br>40°C (High pH) |

### ◆ 特点

- 辛烷基硅烷键合硅胶色谱柱
- 高性价比的C8柱,通用性强
- 比C18保留能力弱,可用于分子量稍大的化合物分析
- 碱性化合物峰形更优异,主要应用于制药领域

### ◆ 应用案例

#### 吗替麦考酚酯有关物质测定

方法:《中国药典》2020 版

色谱柱:MicroPulite® Gold C8 4.6\*250mm 5.0µm

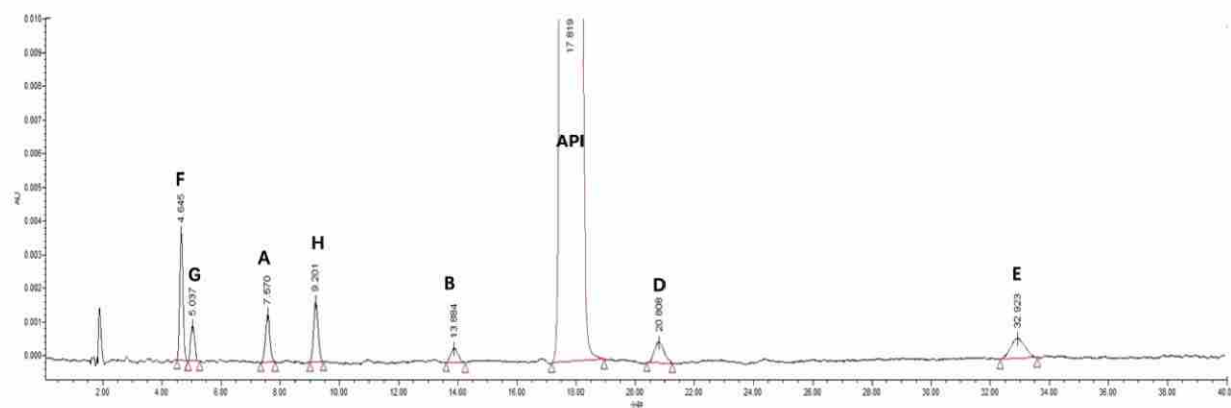
检测器:UV 250nm

流速:1.5mL/min

柱温:45°C

流动相:磷酸盐缓冲液(取三乙胺2mL,加水650mL,混匀,用稀磷酸调节pH 值至5.3)-乙腈(65 : 35)

色谱图:



## MicroPulite® Gold C8 订购信息

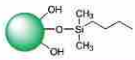
| 可选粒径: 3 μm |              | 可选粒径: 3.5 μm |              | 可选粒径: 5 μm |              |
|------------|--------------|--------------|--------------|------------|--------------|
| 规格         | 货号 (P/N)     | 规格           | 货号 (P/N)     | 规格         | 货号 (P/N)     |
| 30x2.1mm   | GDC08-032130 | 30x2.1mm     | 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 |

| 可选粒径: 5 μm |               | 可选粒径: 10 μm |                |
|------------|---------------|-------------|----------------|
| 规格         | 货号 (P/N)      | 规格          | 货号 (P/N)       |
| 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 色谱柱

Gold C4的碳链更短, 保留能力比C18和C8更弱, 适用于分析小分子中分子量偏大的化合物、蛋白质等大分子化合物。

| 固定相 | 键合相                                                                               | 碳载量  | 比表面积 | 封端  | 孔径   | 可选粒径              | USP分类 | pH范围 | 温度上限                            |
|-----|-----------------------------------------------------------------------------------|------|------|-----|------|-------------------|-------|------|---------------------------------|
| C4  |  | 3.9% | 300  | Yes | 120Å | 3, 3.5<br>5, 10µm | L26   | 2-8  | 60°C (Low pH)<br>40°C (High pH) |

### MicroPulite® Gold C4 订购信息

| 可选粒径: 3 µm |              | 可选粒径: 3.5 µm |              | 可选粒径: 5 µm |              |
|------------|--------------|--------------|--------------|------------|--------------|
| 规格         | 货号 (P/N)     | 规格           | 货号 (P/N)     | 规格         | 货号 (P/N)     |
| 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 |

| 可选粒径: 5 µm |               | 可选粒径: 10µm |                |
|------------|---------------|------------|----------------|
| 规格         | 货号 (P/N)      | 规格         | 货号 (P/N)       |
| 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 色谱柱

带有极性内嵌基团的Gold RP18 采用专利三键键合技术, 键合相在高水相条件下抗流失性增强, 能耐受100%纯水。

| 固定相  | 键合相                                                                               | 碳载量 | 比表面积 | 封端  | 孔径   | 可选粒径              | USP分类 | pH范围 | 温度上限                            |
|------|-----------------------------------------------------------------------------------|-----|------|-----|------|-------------------|-------|------|---------------------------------|
| RP18 |  | 20% | 300  | Yes | 120Å | 3, 3.5<br>5, 10µm | L1    | 1-8  | 60°C (Low pH)<br>40°C (High pH) |

### MicroPulite® Gold RP18 订购信息

| 可选粒径: 3 µm |              |
|------------|--------------|
| 规格         | 货号 (P/N)     |
| 30x2.1mm   | GDR18-032130 |
| 50x2.1mm   | GDR18-052130 |
| 100x2.1mm  | GDR18-102130 |
| 150x2.1mm  | GDR18-152130 |
| 30x3.0mm   | GDR18-033030 |
| 50x3.0mm   | GDR18-053030 |
| 100x3.0mm  | GDR18-103030 |
| 150x3.0mm  | GDR18-153030 |
| 250x3.0mm  | GDR18-253030 |
| 30x4.6mm   | GDR18-034630 |
| 50x4.6mm   | GDR18-054630 |
| 100x4.6mm  | GDR18-104630 |
| 150x4.6mm  | GDR18-154630 |
| 200x4.6mm  | GDR18-204630 |
| 250x4.6mm  | GDR18-254630 |

| 可选粒径: 3.5 µm |              |
|--------------|--------------|
| 规格           | 货号 (P/N)     |
| 30x2.1mm     | GDR18-032135 |
| 50x2.1mm     | GDR18-052135 |
| 100x2.1mm    | GDR18-102135 |
| 150x2.1mm    | GDR18-152135 |
| 30x3.0mm     | GDR18-033035 |
| 50x3.0mm     | GDR18-053035 |
| 100x3.0mm    | GDR18-103035 |
| 150x3.0mm    | GDR18-153035 |
| 250x3.0mm    | GDR18-253035 |
| 30x4.6mm     | GDR18-034635 |
| 50x4.6mm     | GDR18-054635 |
| 100x4.6mm    | GDR18-104635 |
| 150x4.6mm    | GDR18-154635 |
| 200x4.6mm    | GDR18-204635 |
| 250x4.6mm    | GDR18-254635 |

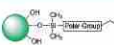
| 可选粒径: 5 µm |              |
|------------|--------------|
| 规格         | 货号 (P/N)     |
| 30x2.1mm   | GDR18-032150 |
| 50x2.1mm   | GDR18-052150 |
| 100x2.1mm  | GDR18-102150 |
| 150x2.1mm  | GDR18-152150 |
| 30x3.0mm   | GDR18-033050 |
| 50x3.0mm   | GDR18-053050 |
| 100x3.0mm  | GDR18-103050 |
| 150x3.0mm  | GDR18-153050 |
| 250x3.0mm  | GDR18-253050 |
| 30x4.6mm   | GDR18-034650 |
| 50x4.6mm   | GDR18-054650 |
| 100x4.6mm  | GDR18-104650 |
| 150x4.6mm  | GDR18-154650 |
| 200x4.6mm  | GDR18-204650 |
| 250x4.6mm  | GDR18-254650 |

| 可选粒径: 5 µm |               |
|------------|---------------|
| 规格         | 货号 (P/N)      |
| 150x10mm   | GDR18-1510050 |
| 250x10mm   | GDR18-2510050 |
| 150x20mm   | GDR18-1520050 |
| 250x20mm   | GDR18-2520050 |
| 150x21.2mm | GDR18-1521250 |
| 250x21.2mm | GDR18-2521250 |
| 150x30mm   | GDR18-1530050 |
| 250x30mm   | GDR18-2530050 |

| 可选粒径: 10µm |                |
|------------|----------------|
| 规格         | 货号 (P/N)       |
| 150x10mm   | GDR18-15100100 |
| 250x10mm   | GDR18-25100100 |
| 150x20mm   | GDR18-15200100 |
| 250x20mm   | GDR18-25200100 |
| 150x21.2mm | GDR18-15212100 |
| 250x21.2mm | GDR18-25212100 |
| 150x30mm   | GDR18-15300100 |
| 250x30mm   | GDR18-25300100 |

## MicroPulite® Gold RP18 Plus 色谱柱

为增加化合物的保留，C18色谱柱经常需要用到高水相甚至纯水相，而长期在高水相使用容易造成色谱柱疏水塌陷。Gold RP18 Plus通过在十八烷基链内嵌极性基团，能有效利用极性基团的亲水作用避免疏水塌陷的发生，使其能兼容并耐受100%纯水相，同时也能屏蔽硅胶表面的残留硅醇基作用，减少碱性化合物的拖尾，并提供与C18不同的选择性。

| 固定相       | 键合相                                                                               | 碳载量 | 比表面积 | 封端  | 孔径   | 可选粒径            | USP分类 | pH范围 | 温度上限                            |
|-----------|-----------------------------------------------------------------------------------|-----|------|-----|------|-----------------|-------|------|---------------------------------|
| RP18 Plus |  | 17% | 300  | Yes | 120Å | 3,3.5<br>5,10µm | L1    | 2-8  | 60°C (Low pH)<br>40°C (High pH) |

### ◆应用案例

#### 独一味的含量测定

方法:《中国药典》2020 版

色谱柱:MicroPulite® Gold RP18 Plus 4.6\*250mm 5.0µm(货号:GDR18P-254650)

检测器:UV 235nm

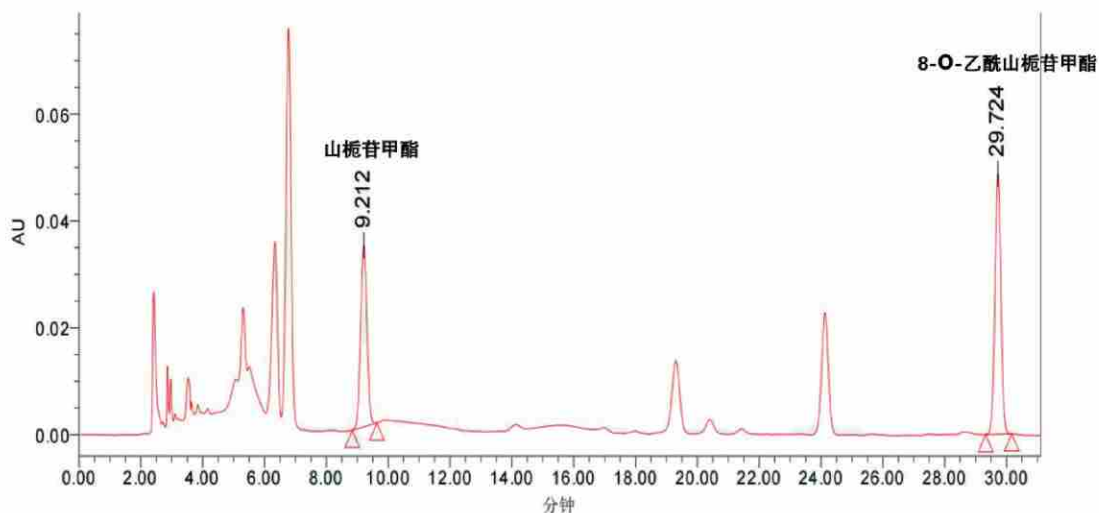
流速:1.0mL/min

柱温:30°C

流动相:A相:乙腈 ;B相:水

| 时间(分钟) | A% | B% |
|--------|----|----|
| 0      | 9  | 91 |
| 11     | 9  | 91 |
| 35     | 18 | 82 |
| 45     | 18 | 82 |

色谱图:



## ◆应用案例

### 聚维酮K30中2-吡咯烷酮测定

方法来源:《中国药典》

色谱柱:MicroPulite® Gold RP18 Plus 5 $\mu$ m 250\*4.6mm

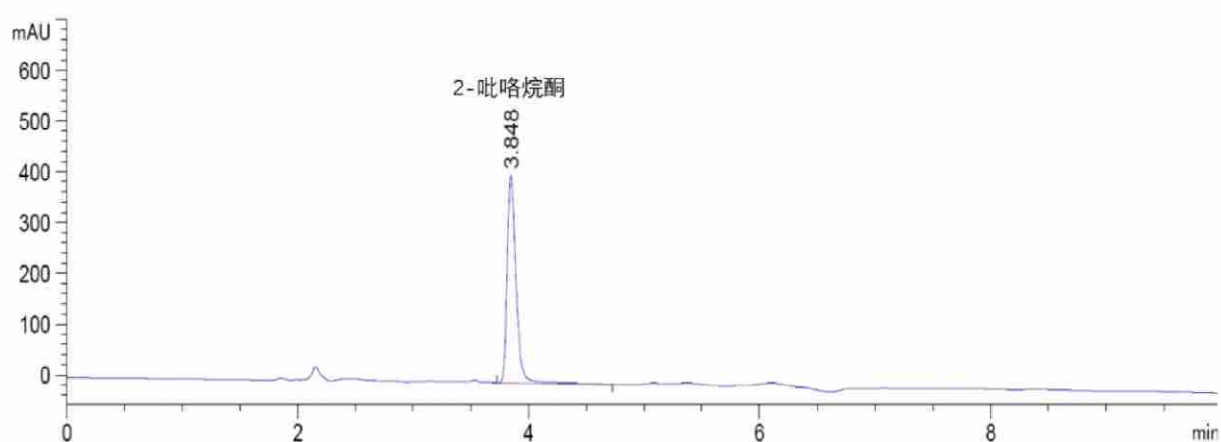
检测波长:UV 205nm

流速:1.0mL/min

柱温:30°C

流动相:乙腈-甲醇-水=(5:5:90)

色谱图:



## MicroPulite® Gold RP18 Plus 订购信息

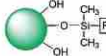
| 可选粒径: 3 µm |               | 可选粒径: 3.5 µm |               | 可选粒径: 5 µm |               |
|------------|---------------|--------------|---------------|------------|---------------|
| 规格         | 货号 (P/N)      | 规格           | 货号 (P/N)      | 规格         | 货号 (P/N)      |
| 30x2.1mm   | GDR18P-032130 | 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 |

| 可选粒径: 5 µm |                | 可选粒径: 10µm |                 |
|------------|----------------|------------|-----------------|
| 规格         | 货号 (P/N)       | 规格         | 货号 (P/N)        |
| 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 色谱柱

与Gold C8柱相比, Gold RP8 Plus能兼容并耐受100%纯水, 并提供与Gold C8不同的选择性。

| 固定相      | 键合相                                                                               | 碳载量 | 比表面积 | 封端  | 孔径   | 可选粒径        | USP分类 | pH范围 | 温度上限                            |
|----------|-----------------------------------------------------------------------------------|-----|------|-----|------|-------------|-------|------|---------------------------------|
| RP8 Plus |  | 15% | 300  | Yes | 120Å | 3, 3.5, 5µm | L7    | 2-8  | 60°C (Low pH)<br>40°C (High pH) |

### MicroPulite® Gold RP8 Plus 订购信息

| 可选粒径: 3 µm |               | 可选粒径: 3.5 µm |               | 可选粒径: 5 µm |               |
|------------|---------------|--------------|---------------|------------|---------------|
| 规格         | 货号 (P/N)      | 规格           | 货号 (P/N)      | 规格         | 货号 (P/N)      |
| 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 |

| 可选粒径: 5 µm |                |
|------------|----------------|
| 规格         | 货号 (P/N)       |
| 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 色谱柱

Gold RP4 Plus用于反相条件下分析大极性蛋白,兼容并耐受100%纯水相,极大地增强了蛋白质的反相保留。

| 固定相      | 键合相                                                                               | 碳载量  | 比表面积 | 封端  | 孔径   | 可选粒径        | USP分类 | pH范围 | 温度上限                            |
|----------|-----------------------------------------------------------------------------------|------|------|-----|------|-------------|-------|------|---------------------------------|
| RP4 Plus |  | 3.9% | 300  | Yes | 120Å | 3, 3.5, 5µm | L26   | 2-8  | 60°C (Low pH)<br>40°C (High pH) |

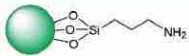
**MicroPulite® Gold RP4 Plus 订购信息**

| 可选粒径: 3 μm |               | 可选粒径: 3.5 μm |               | 可选粒径: 5 μm |               |
|------------|---------------|--------------|---------------|------------|---------------|
| 规格         | 货号 (P/N)      | 规格           | 货号 (P/N)      | 规格         | 货号 (P/N)      |
| 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 |

| 可选粒径: 5 μm |                |
|------------|----------------|
| 规格         | 货号 (P/N)       |
| 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 NH<sub>2</sub> 色谱柱

Gold NH<sub>2</sub>是氨丙基键合硅胶色谱柱,能在亲水模式和正相流动相条件下使用,采用三键键合技术能有效降低色谱柱键合相流失。

| 固定相             | 键合相                                                                               | 碳载量  | 比表面积 | 封端 | 孔径   | 可选粒径        | USP分类 | pH范围 | 温度上限                            |
|-----------------|-----------------------------------------------------------------------------------|------|------|----|------|-------------|-------|------|---------------------------------|
| NH <sub>2</sub> |  | 3.8% | 300  | No | 120Å | 3, 3.5, 5µm | L8    | 2-8  | 60°C (Low pH)<br>40°C (High pH) |

### ◆应用案例

#### 枸杞子中甜菜碱测定

方法来源:《中国药典》

色谱柱: MicroPulite® Gold NH<sub>2</sub> 5µm 250\*4.6mm

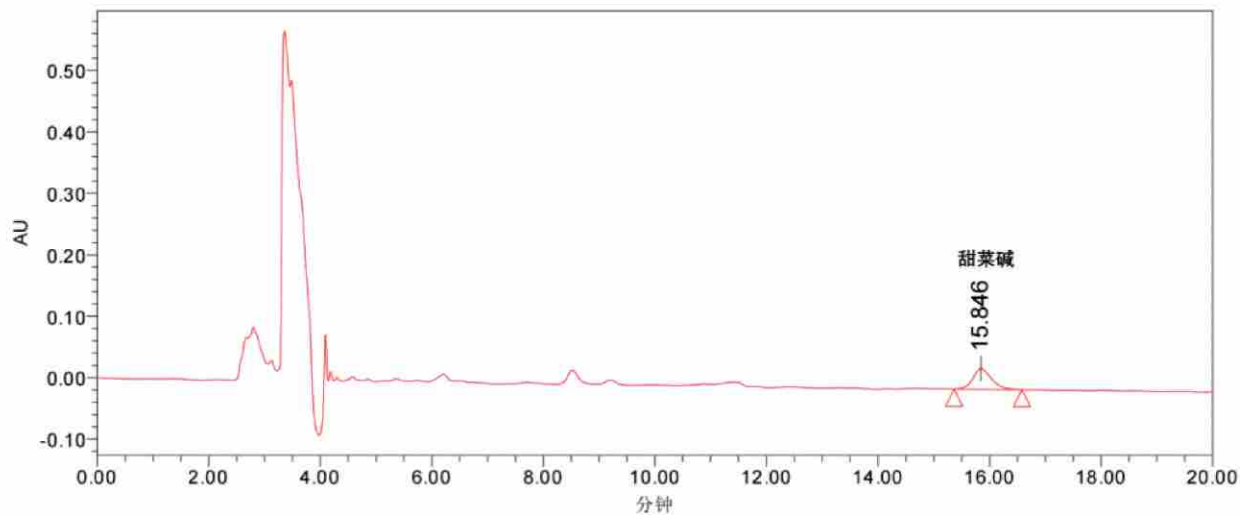
检测波长: UV 195nm

流速: 1.0mL/min

柱温: 30°C

流动相: 乙腈-水= (85: 15)

色谱图:



## MicroPulite® Gold NH<sub>2</sub> 订购信息

| 可选粒径: 3 μm |             |
|------------|-------------|
| 规格         | 货号 (P/N)    |
| 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 |

| 可选粒径: 3.5 μm |             |
|--------------|-------------|
| 规格           | 货号 (P/N)    |
| 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 |

| 可选粒径: 5 μm |             |
|------------|-------------|
| 规格         | 货号 (P/N)    |
| 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 |

| 可选粒径: 5 μm |              |
|------------|--------------|
| 规格         | 货号 (P/N)     |
| 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 色谱柱

Gold HILIC是未键合的硅胶色谱柱,在亲水作用模式下使用,用于保留反相无法保留的大极性化合物。Gold HILIC也可以在正相条件下按硅胶柱使用。

| 固定相   | 键合相                                                                               | 碳载量 | 比表面积 | 封端 | 孔径   | 可选粒径            | USP分类 | pH范围 | 温度上限                            |
|-------|-----------------------------------------------------------------------------------|-----|------|----|------|-----------------|-------|------|---------------------------------|
| HILIC |  | -   | 300  | No | 120Å | 3,3.5<br>5,10µm | L3    | 2-7  | 60°C (Low pH)<br>40°C (High pH) |

### ◆应用案例

#### 大豆磷脂中五种磷脂的分析

色谱柱: MicroPulite® Gold HILIC 5µm 250\*4.6mm

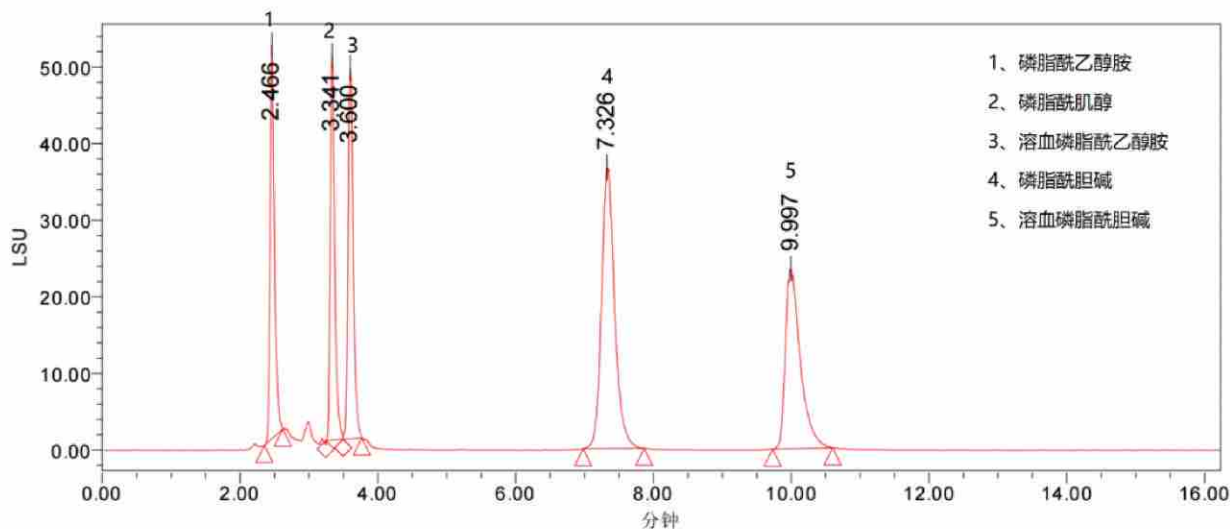
检测器: 蒸发光散射检测器

流速: 1.0mL/min

柱温: 40°C

流动相: 甲醇-50mM乙酸铵= (95: 5)

色谱图:



## MicroPulite® Gold HILIC 订购信息

| 可选粒径: 3 $\mu\text{m}$ |            |
|-----------------------|------------|
| 规格                    | 货号 (P/N)   |
| 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 |

| 可选粒径: 3.5 $\mu\text{m}$ |            |
|-------------------------|------------|
| 规格                      | 货号 (P/N)   |
| 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 |

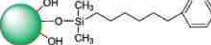
| 可选粒径: 5 $\mu\text{m}$ |            |
|-----------------------|------------|
| 规格                    | 货号 (P/N)   |
| 30x2.1mm              | GDH-032150 |
| 50x2.1mm              | GDH-052150 |
| 100x2.1mm             | GDH-102150 |
| 150x2.1mm             | GDH-152150 |
| 30x3.0mm              | GDH-033050 |
| 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 |

| 可选粒径: 5 $\mu\text{m}$ |             |
|-----------------------|-------------|
| 规格                    | 货号 (P/N)    |
| 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 |

| 可选粒径: 10 $\mu\text{m}$ |              |
|------------------------|--------------|
| 规格                     | 货号 (P/N)     |
| 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 色谱柱

Gold Phenyl-Hexyl采用己基连接苯环,与丙基-苯环相比, Gold Phenyl-Hexyl能减少键合相水解从而提升化学稳定性。Gold Phenyl-Hexyl能提供与C18或C8等直链烷烃色谱柱互补的选择性,适用于分析芳香族化合物、胺类化合物及极性化合物。

| 固定相          | 键合相                                                                               | 碳载量 | 比表面积 | 封端  | 孔径   | 可选粒径            | USP分类 | pH范围 | 温度上限                            |
|--------------|-----------------------------------------------------------------------------------|-----|------|-----|------|-----------------|-------|------|---------------------------------|
| Phenyl-Hexyl |  | 13% | 300  | Yes | 120Å | 3,3.5<br>5,10µm | L11   | 2-8  | 60°C (Low pH)<br>40°C (High pH) |

### ◆应用案例

#### 莱菔子含量测定(芥子碱硫氰酸盐)

方法来源:《中国药典》

色谱柱: MicroPulite® Gold Phenyl-Hexyl 5µm 250\*4.6mm

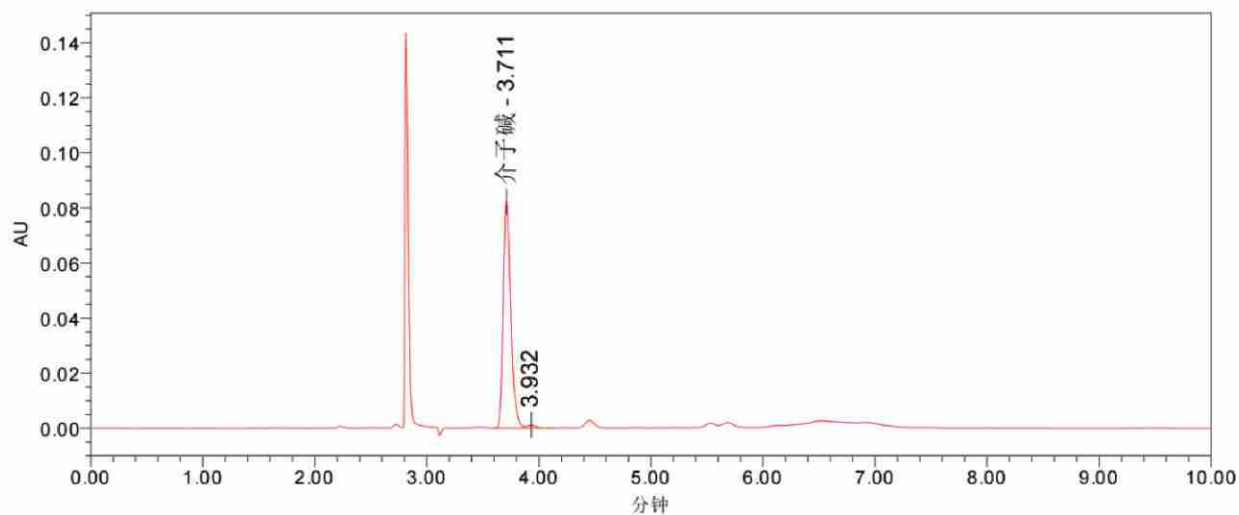
检测波长: UV 326nm

流速: 1.0mL/min

柱温: 35°C

流动相: 乙腈-3%冰醋酸= (15: 85)

色谱图:



## MicroPulite® Gold Phenyl- Hexyl 订购信息

| 可选粒径: 3 μm |             |
|------------|-------------|
| 规格         | 货号 (P/N)    |
| 30x2.1mm   | GDPH-032130 |
| 50x2.1mm   | GDPH-052130 |
| 100x2.1mm  | GDPH-102130 |
| 150x2.1mm  | GDPH-152130 |
| 30x3.0mm   | GDPH-033030 |
| 50x3.0mm   | GDPH-053030 |
| 100x3.0mm  | GDPH-103030 |
| 150x3.0mm  | GDPH-153030 |
| 250x3.0mm  | GDPH-253030 |
| 30x4.6mm   | GDPH-034630 |
| 50x4.6mm   | GDPH-054630 |
| 100x4.6mm  | GDPH-104630 |
| 150x4.6mm  | GDPH-154630 |
| 200x4.6mm  | GDPH-204630 |
| 250x4.6mm  | GDPH-254630 |

| 可选粒径: 3.5 μm |             |
|--------------|-------------|
| 规格           | 货号 (P/N)    |
| 30x2.1mm     | GDPH-032135 |
| 50x2.1mm     | GDPH-052135 |
| 100x2.1mm    | GDPH-102135 |
| 150x2.1mm    | GDPH-152135 |
| 30x3.0mm     | GDPH-033035 |
| 50x3.0mm     | GDPH-053035 |
| 100x3.0mm    | GDPH-103035 |
| 150x3.0mm    | GDPH-153035 |
| 250x3.0mm    | GDPH-253035 |
| 30x4.6mm     | GDPH-034635 |
| 50x4.6mm     | GDPH-054635 |
| 100x4.6mm    | GDPH-104635 |
| 150x4.6mm    | GDPH-154635 |
| 200x4.6mm    | GDPH-204635 |
| 250x4.6mm    | GDPH-254635 |

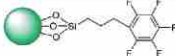
| 可选粒径: 5 μm |             |
|------------|-------------|
| 规格         | 货号 (P/N)    |
| 30x2.1mm   | GDPH-032150 |
| 50x2.1mm   | GDPH-052150 |
| 100x2.1mm  | GDPH-102150 |
| 150x2.1mm  | GDPH-152150 |
| 30x3.0mm   | GDPH-033050 |
| 50x3.0mm   | GDPH-053050 |
| 100x3.0mm  | GDPH-103050 |
| 150x3.0mm  | GDPH-153050 |
| 250x3.0mm  | GDPH-253050 |
| 30x4.6mm   | GDPH-034650 |
| 50x4.6mm   | GDPH-054650 |
| 100x4.6mm  | GDPH-104650 |
| 150x4.6mm  | GDPH-154650 |
| 200x4.6mm  | GDPH-204650 |
| 250x4.6mm  | GDPH-254650 |

| 可选粒径: 5 μm |              |
|------------|--------------|
| 规格         | 货号 (P/N)     |
| 150x10mm   | GDPH-1510050 |
| 250x10mm   | GDPH-2510050 |
| 150x20mm   | GDPH-1520050 |
| 250x20mm   | GDPH-2520050 |
| 150x21.2mm | GDPH-1521250 |
| 250x21.2mm | GDPH-2521250 |
| 150x30mm   | GDPH-1530050 |
| 250x30mm   | GDPH-2530050 |

| 可选粒径: 10 μm |               |
|-------------|---------------|
| 规格          | 货号 (P/N)      |
| 150x10mm    | GDPH-15100100 |
| 250x10mm    | GDPH-25100100 |
| 150x20mm    | GDPH-15200100 |
| 250x20mm    | GDPH-25200100 |
| 150x21.2mm  | GDPH-15212100 |
| 250x21.2mm  | GDPH-25212100 |
| 150x30mm    | GDPH-15300100 |
| 250x30mm    | GDPH-25300100 |

## MicroPulite® Gold PFP 色谱柱

Gold PFP 为五氟苯基丙基硅烷键合硅胶色谱柱, 受氢键、偶极-偶极相互作用、芳香族和 $\pi$ - $\pi$ 、疏水性等作用机制的影响, Gold PFP具有独特的选择性, 适用于芳香族化合物、卤代化合物、平面位置异构体等的分析, 并对极性化合物的保留有所增强。

| 固定相 | 键合相                                                                               | 碳载量 | 比表面积 | 封端  | 孔径   | 可选粒径                    | USP分类 | pH范围 | 温度上限                            |
|-----|-----------------------------------------------------------------------------------|-----|------|-----|------|-------------------------|-------|------|---------------------------------|
| PFP |  | 10% | 300  | Yes | 120Å | 3, 3.5<br>5, 10 $\mu$ m | L43   | 2-8  | 60°C (Low pH)<br>40°C (High pH) |

### ◆应用案例

#### 苯基甲基砒与苯基甲基亚砒

色谱柱: MicroPulite® Gold PFP 5 $\mu$ m 250\*4.6mm

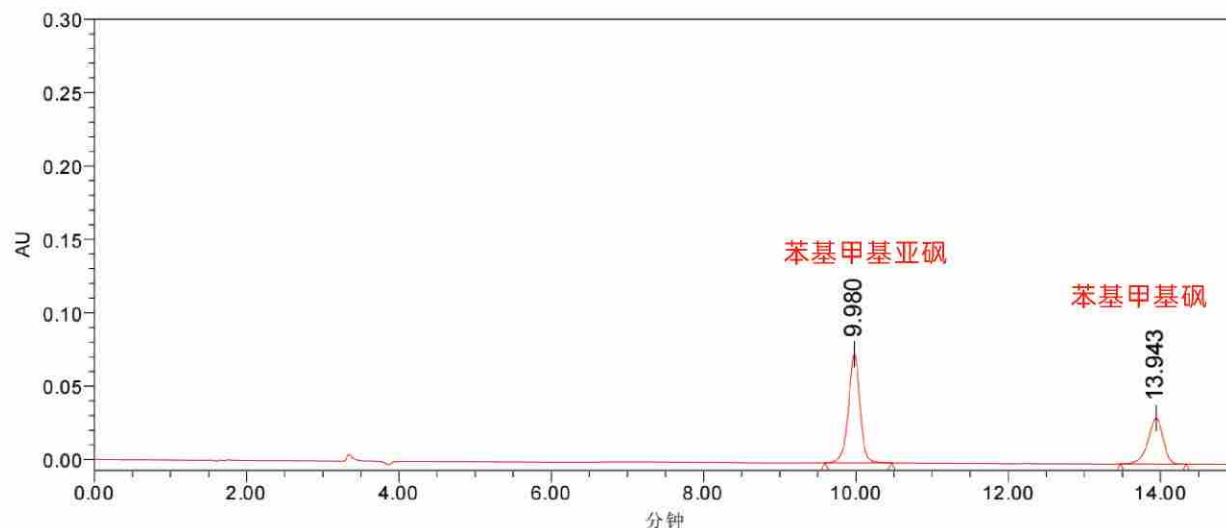
检测波长: UV 210nm

流速: 1.0mL/min

柱温: 40°C

流动相: 乙腈-水= (15: 85)

色谱图:



## MicroPulite® Gold PFP 订购信息

| 可选粒径: 3 μm |              |
|------------|--------------|
| 规格         | 货号 (P/N)     |
| 30x2.1mm   | GDPFP-032130 |
| 50x2.1mm   | GDPFP-052130 |
| 100x2.1mm  | GDPFP-102130 |
| 150x2.1mm  | GDPFP-152130 |
| 30x3.0mm   | GDPFP-033030 |
| 50x3.0mm   | GDPFP-053030 |
| 100x3.0mm  | GDPFP-103030 |
| 150x3.0mm  | GDPFP-153030 |
| 250x3.0mm  | GDPFP-253030 |
| 30x4.6mm   | GDPFP-034630 |
| 50x4.6mm   | GDPFP-054630 |
| 100x4.6mm  | GDPFP-104630 |
| 150x4.6mm  | GDPFP-154630 |
| 200x4.6mm  | GDPFP-204630 |
| 250x4.6mm  | GDPFP-254630 |

| 可选粒径: 3.5 μm |              |
|--------------|--------------|
| 规格           | 货号 (P/N)     |
| 30x2.1mm     | GDPFP-032135 |
| 50x2.1mm     | GDPFP-052135 |
| 100x2.1mm    | GDPFP-102135 |
| 150x2.1mm    | GDPFP-152135 |
| 30x3.0mm     | GDPFP-033035 |
| 50x3.0mm     | GDPFP-053035 |
| 100x3.0mm    | GDPFP-103035 |
| 150x3.0mm    | GDPFP-153035 |
| 250x3.0mm    | GDPFP-253035 |
| 30x4.6mm     | GDPFP-034635 |
| 50x4.6mm     | GDPFP-054635 |
| 100x4.6mm    | GDPFP-104635 |
| 150x4.6mm    | GDPFP-154635 |
| 200x4.6mm    | GDPFP-204635 |
| 250x4.6mm    | GDPFP-254635 |

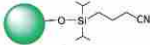
| 可选粒径: 5 μm |              |
|------------|--------------|
| 规格         | 货号 (P/N)     |
| 30x2.1mm   | GDPFP-032150 |
| 50x2.1mm   | GDPFP-052150 |
| 100x2.1mm  | GDPFP-102150 |
| 150x2.1mm  | GDPFP-152150 |
| 30x3.0mm   | GDPFP-033050 |
| 50x3.0mm   | GDPFP-053050 |
| 100x3.0mm  | GDPFP-103050 |
| 150x3.0mm  | GDPFP-153050 |
| 250x3.0mm  | GDPFP-253050 |
| 30x4.6mm   | GDPFP-034650 |
| 50x4.6mm   | GDPFP-054650 |
| 100x4.6mm  | GDPFP-104650 |
| 150x4.6mm  | GDPFP-154650 |
| 200x4.6mm  | GDPFP-204650 |
| 250x4.6mm  | GDPFP-254650 |

| 可选粒径: 5 μm |               |
|------------|---------------|
| 规格         | 货号 (P/N)      |
| 150x10mm   | GDPFP-1510050 |
| 250x10mm   | GDPFP-2510050 |
| 150x20mm   | GDPFP-1520050 |
| 250x20mm   | GDPFP-2520050 |
| 150x21.2mm | GDPFP-1521250 |
| 250x21.2mm | GDPFP-2521250 |
| 150x30mm   | GDPFP-1530050 |
| 250x30mm   | GDPFP-2530050 |

| 可选粒径: 10 μm |                |
|-------------|----------------|
| 规格          | 货号 (P/N)       |
| 150x10mm    | GDPFP-15100100 |
| 250x10mm    | GDPFP-25100100 |
| 150x20mm    | GDPFP-15200100 |
| 250x20mm    | GDPFP-25200100 |
| 150x21.2mm  | GDPFP-15212100 |
| 250x21.2mm  | GDPFP-25212100 |
| 150x30mm    | GDPFP-15300100 |
| 250x30mm    | GDPFP-25300100 |

## MicroPulite® Gold CN 色谱柱

Gold CN柱能在正相和反相条件下使用,反相在C18\C8上疏水保留很强、难以洗脱的化合物,可以用氰基柱,它提供了与C18\C8\C4\苯基不同的选择性,用于分析含羧基、羟基和胺的化合物。

| 固定相 | 键合相                                                                               | 碳载量 | 比表面积 | 封端  | 孔径   | 可选粒径 | USP分类 | pH范围 | 温度上限                            |
|-----|-----------------------------------------------------------------------------------|-----|------|-----|------|------|-------|------|---------------------------------|
| CN  |  | 5%  | 300  | Yes | 120Å | 5µm  | L10   | 2-8  | 45°C (Low pH)<br>45°C (High pH) |

### ◆应用案例

#### 妇科再造胶囊——芍药苷测定

方法来源: 企标

色谱柱: MicroPulite® Gold CN 5µm 250\*4.6mm

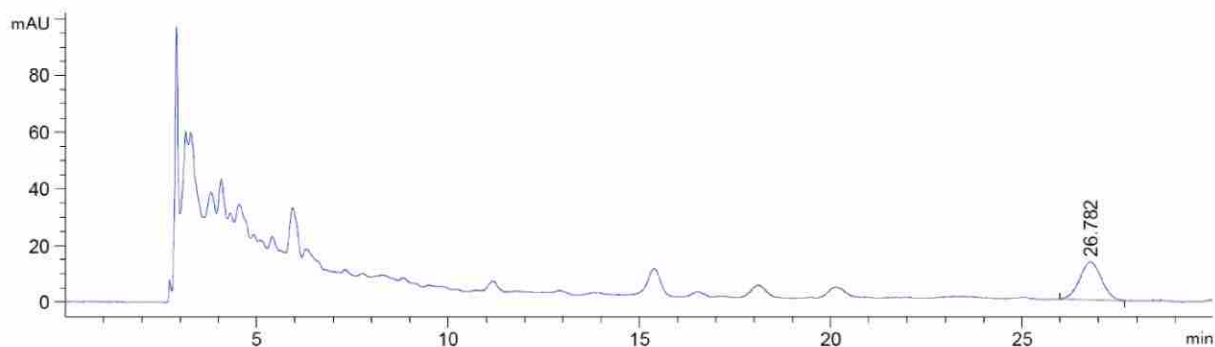
检测波长: UV 230nm

流速: 1.0mL/min

柱温: 30°C

流动相: 甲醇-水= (11: 89)

色谱图:



### MicroPulite® Gold CN 订购信息

| 可选粒径: 5 µm |             |
|------------|-------------|
| 规格         | 货号 (P/N)    |
| 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色谱柱： 纯硅胶基质色谱柱的新标准

Platinum 色谱柱高载量的设计，比表面积最大化，使得该系列具有出色的载样量，作为通用型色谱柱具有C18/C8柱可供选择。

- 硅胶基质色谱柱，高载样量
- 低pH条件下，化合物峰形优异、柱效高
- 碱性化合物峰形更好

| 固定相          | 键合相   | 碳载量 | 孔径   | 可选粒径          | USP分类 | pH范围 | 温度上限                            |
|--------------|-------|-----|------|---------------|-------|------|---------------------------------|
| Platinum C18 | 特有C18 | 16% | 100Å | 3.5, 5, 10 μm | L1    | 1-8  | 50°C (Low pH)<br>40°C (High pH) |
| Platinum C8  | 特有C8  | 12% | 100Å | 3.5, 5, 10 μm | L7    | 1-8  | 40°C (Low pH)<br>40°C (High pH) |

## MicroPulite® Platinum C18 色谱柱

Platinum C18采用独特的键合和封端技术,在低/中pH流动相条件下使用时,酸性、碱性、中性化合物都能获得对称的峰形,并在低pH条件下使用具有更出色的稳定性,从而延长了色谱柱的使用寿命。

| 固定相 | 键合相   | 碳载量 | 比表面积 | 封端  | 孔径   | 可选粒径       | USP分类 | pH范围 | 温度上限                            |
|-----|-------|-----|------|-----|------|------------|-------|------|---------------------------------|
| C18 | 特有C18 | 16% | 320  | Yes | 100Å | 3.5,5,10µm | L1    | 1-8  | 50°C (Low pH)<br>40°C (High pH) |

### ◆应用案例

#### 紫杉醇注射液有关物质测定

方法:《中国药典》2020 版

色谱柱:MicroPulite® Platinum C18 4.6\*250mm 5.0µm(货号:PTC18-254650)

检测器:UV 227nm

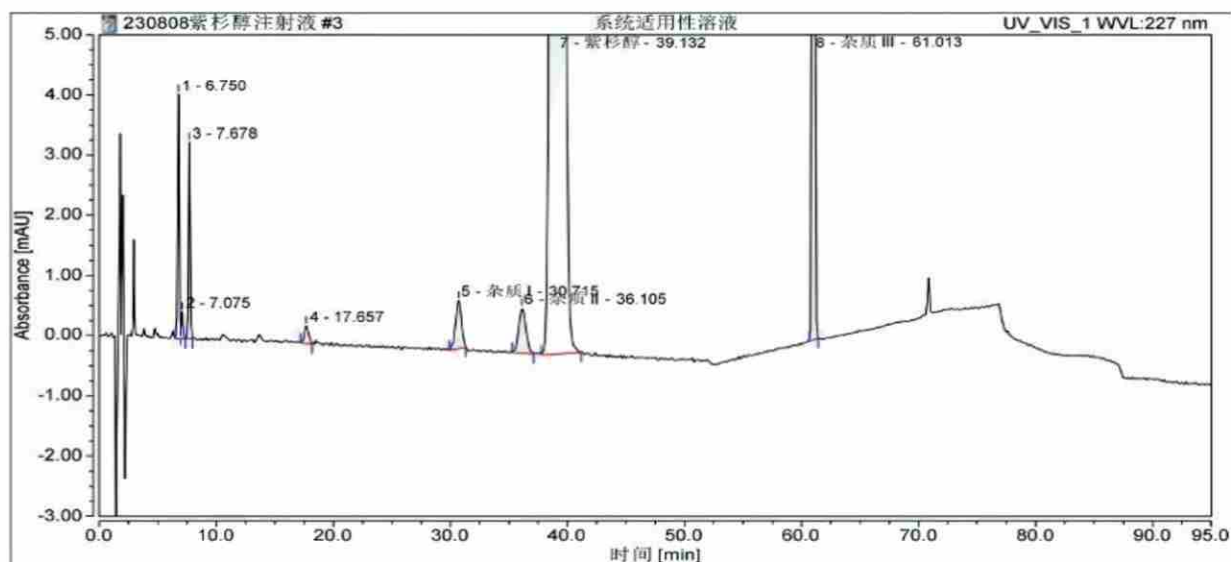
流速:1.5mL/min

柱温:30°C

流动相:A相:水 ;B相:乙腈

| 时间 (分钟) | A% | B% |
|---------|----|----|
| 0       | 60 | 40 |
| 25      | 20 | 80 |
| 35      | 60 | 40 |
| 45      | 60 | 40 |

色谱图:



## ◆应用案例

### 氧氟沙星氯化钠注射液有关物质测定

方法来源：《中国药典》

色谱柱：MicroPulite® Platinum C18 5 $\mu$ m 250\*4.6mm

检测波长：UV 294nm、238nm

流速：1.0mL/min

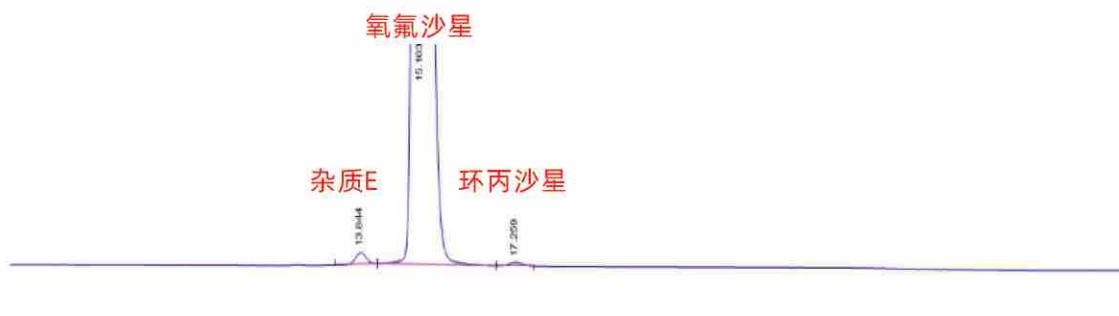
柱温：40℃

流动相：A：醋酸铵高氯酸钠溶液（取醋酸铵4.0g和高氯酸钠7.0g，加水1300ml使溶解，磷酸调节pH值至2.2）；流动相B：乙腈

梯度洗脱：0min:0%B；18min:0%B；25min:30%B；39min:30%B；40min0: %B；50min:0%B.

系统适用性溶液（294nm）

色谱图：



杂质A对照品溶液(238nm)



## MicroPulite® Platinum C18 订购信息

| 可选粒径: 3.5 $\mu\text{m}$ |              |
|-------------------------|--------------|
| 规格                      | 货号 (P/N)     |
| 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 |

| 可选粒径: 5 $\mu\text{m}$ |              |
|-----------------------|--------------|
| 规格                    | 货号 (P/N)     |
| 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 |

| 可选粒径: 5 $\mu\text{m}$ |               |
|-----------------------|---------------|
| 规格                    | 货号 (P/N)      |
| 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 |

| 可选粒径: 10 $\mu\text{m}$ |                |
|------------------------|----------------|
| 规格                     | 货号 (P/N)       |
| 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 色谱柱

Platinum C8同样具有出色的低pH稳定性与对称的峰形,适用于强疏水性化合物的分析。

| 固定相 | 键合相  | 碳载量 | 比表面积 | 封端  | 孔径   | 可选粒径        | USP分类 | pH范围 | 温度上限                            |
|-----|------|-----|------|-----|------|-------------|-------|------|---------------------------------|
| C8  | 特有C8 | 12% | 320  | Yes | 100Å | 3.5,5,10 µm | L7    | 1-8  | 40°C (Low pH)<br>40°C (High pH) |

### MicroPulite® Platinum C8 订购信息

| 可选粒径: 3.5 µm |              |
|--------------|--------------|
| 规格           | 货号 (P/N)     |
| 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 |

| 可选粒径: 5 µm |              |
|------------|--------------|
| 规格         | 货号 (P/N)     |
| 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 |

| 可选粒径: 5 µm |               |
|------------|---------------|
| 规格         | 货号 (P/N)      |
| 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 |

| 可选粒径: 10 µm |                |
|-------------|----------------|
| 规格          | 货号 (P/N)       |
| 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色谱柱: 杂化硅胶技术让方法开发更灵活

XP系列色谱柱采用杂化硅胶技术,结合了有机和无机填料的特点,既保留了纯硅胶填料特性,又具有聚合物填料的宽pH范围稳定性、硅醇基活性低等特点,既保证了色谱的分离性能又延长色谱柱的使用寿命。从分析到制备,XP系列色谱柱可匹配到所有仪器平台,相同填料有多种规格可供选择,以保证方法的延续与转移,从而提高工作效率。

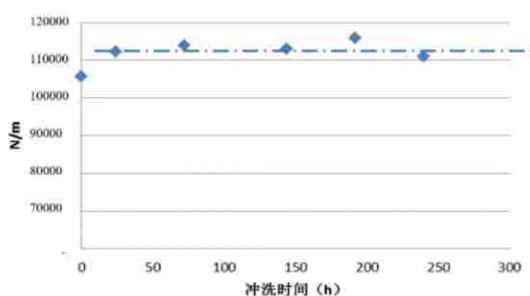
- 特有杂化裸球结构,提高pH耐受范围
- 专利三键修饰和特有封尾,保证高柱效、优异色谱峰对称性
- 多元的键合相设计,增加方法开发选择性,并降低开发难度
- 严格质控标准,保证填料和色谱柱批次之间的稳定

| 固定相                | 键合相 | 碳载量   | 孔径   | 可选粒径                          | USP分类 | pH范围 | 温度上限                            |
|--------------------|-----|-------|------|-------------------------------|-------|------|---------------------------------|
| XP tC18            |     | 18%   | 130Å | 1.7,2.5,3.3,5,5.7,10µm        | L1    | 1-12 | 80°C (Low pH)<br>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)<br>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)<br>50°C (High pH) |
| XP RP18            |     | 18%   | 130Å | 1.7,2.5,3.3,5,5.7,10µm        | L1    | 2-11 | 50°C (Low pH)<br>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)<br>45°C (High pH) |
| XP NH <sub>2</sub> |     | 9%    | 130Å | 3.5,5µm                       | L8    | 1-9  | 45°C (Low pH)<br>45°C (High pH) |
| XP T3              |     | 14%   | 130Å | 3.5, 5, 7, 10µm               | L1    | 1-12 | 80°C (Low pH)<br>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)<br>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)<br>90°C (High pH) |
| XP HILIC           |     | -     | 130Å | 1.7,2.5,3.3,5,5.7,10µm        | L3    | 1-9  | 45°C (Low pH)<br>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)<br>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)<br>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)<br>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)<br>60°C (HIGH PH) |

## 宽pH范围的稳定

### 高pH耐用性优异

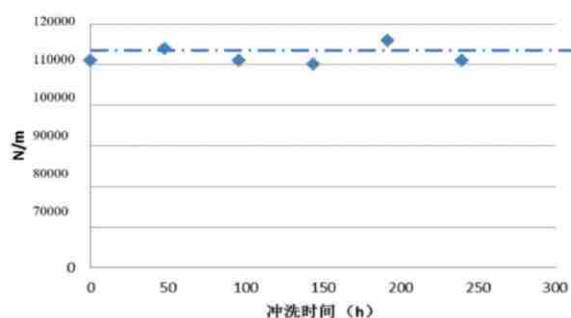
在碱性条件下, 硅胶填料受氢氧根影响可能发生亲核取代反应, 造成硅胶溶解及键合相水解, 最终导致柱效下降。杂化硅胶技术的引入使得硅胶基本骨架在高pH条件下的耐受能力大大提高, 亲核取代反应更难发生, 颗粒表面溶解速度明显变缓, 色谱柱寿命得以延长。在经典的XP tC18 高pH耐用性考察实验中可以看到, XP tC18 在50°C、pH=10的条件下使用240小时后仍保持原来的色谱柱性能。



甲醇/三乙胺7/3, pH=10, 50°C条件下的运行时间

### 提升低pH稳定性

在低pH流动相下长期使用, 色谱柱填料很容易发生键合相水解, 色谱峰保留发生变化。XP tC18 采用专利三键修饰与特有封尾, 提高了对低pH的稳定性和数据的重现性。在低pH耐用性考察实验中, XP tC18 在50°C、pH=1的条件下使用240小时后色谱柱性能仍然稳定。



甲醇/三氟乙酸7/3, pH=1, 50°C条件下的运行时间

## 色谱柱批间稳定性好

为实现一致的色谱分离效果, 微纯严格控制生产工艺的每个环节, 以保证产品的生产质量。以二氢萘为标准物质, 对二十多个不同批次的色谱柱进行柱效与保留时间的考察, 批次间的相对标准偏差都控制在合理范围内。



批次间的柱效稳定性考察



批次间的保留时间稳定性考察

## MicroPulite® XP tC18 色谱柱

XP tC18是适合各种分析物的通用型色谱柱,可以在pH 1-12的宽pH范围内使用,比纯硅胶柱耐受更高的柱温,同时能在不同浓度缓冲盐、离子对试剂的流动相下使用,是方法开发的首选柱。

| 固定相     | 键合相                                                                               | 碳载量 | 比表面积 | 封端  | 孔径   | 可选粒径                         | USP分类 | pH范围 | 温度上限                            |
|---------|-----------------------------------------------------------------------------------|-----|------|-----|------|------------------------------|-------|------|---------------------------------|
| XP tC18 |  | 18% | 185  | Yes | 130Å | 1.7, 2.5, 3, 3.5, 5, 7, 10µm | L1    | 1-12 | 80°C (Low pH)<br>60°C (High pH) |

### ◆应用案例

#### 他克莫司含量测定

方法来源: USP

色谱柱: MicroPulite® XP tC18 3µm 150\*4.6mm

检测波长: UV 220nm

流速: 1.5mL/min

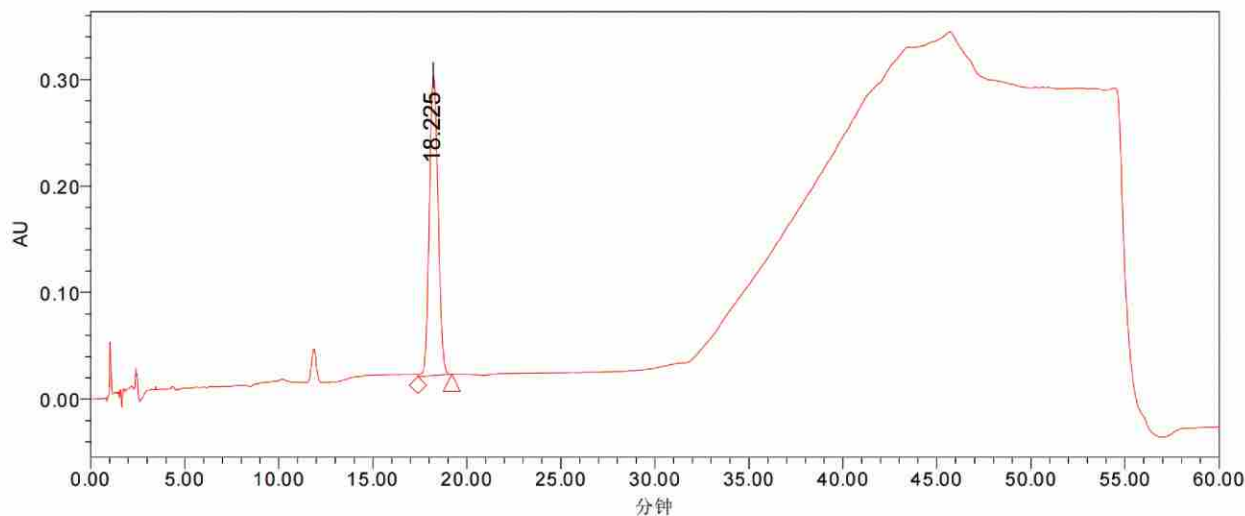
柱温: 60°C

流动相: A: 6mM磷酸溶液; B: 乙腈-甲基叔丁基醚= (81:19) ; C: A相-B相= (4:1) ;

D: A相-B相= (1:4)

| 时间(分钟) | 流动相C (%) | 流动相D (%) |
|--------|----------|----------|
| 0      | 72       | 28       |
| 30     | 72       | 28       |
| 53     | 15       | 85       |
| 54     | 72       | 28       |
| 60     | 72       | 28       |

色谱图:



## 阿奇霉素有关物质测定

方法:EP

色谱柱:MicroPulite® XP tC18 4.6\*250mm 5μm(货号:XPtC18-254650)

检测器:UV 210nm

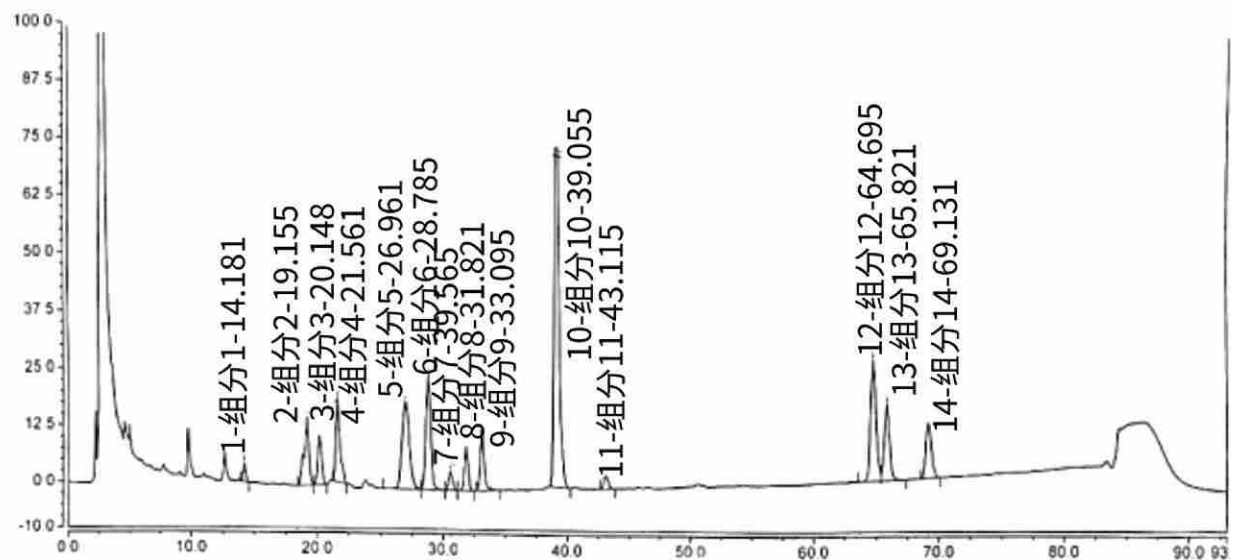
流速:1mL/min

柱温:60°C

流动相:A相:缓冲液(1.8g/L磷酸二氢钠,调pH8.9);B相:甲醇-乙腈=(1:3)

| 时间(分钟) | 水(0.1%TFA) | 乙腈 |
|--------|------------|----|
| 0      | 50         | 50 |
| 25     | 45         | 55 |
| 30     | 40         | 60 |
| 80     | 25         | 75 |
| 81     | 50         | 50 |
| 93     | 50         | 50 |

色谱图:



葛根配方颗粒

方法:《中药配方颗粒国家药品标准(第一批)》

项目:特征图谱

色谱柱:MicroPulite® XP tC18 1.7µm 2.1\*100mm (货号:XPtC18-102117)

检测器:UV 250nm

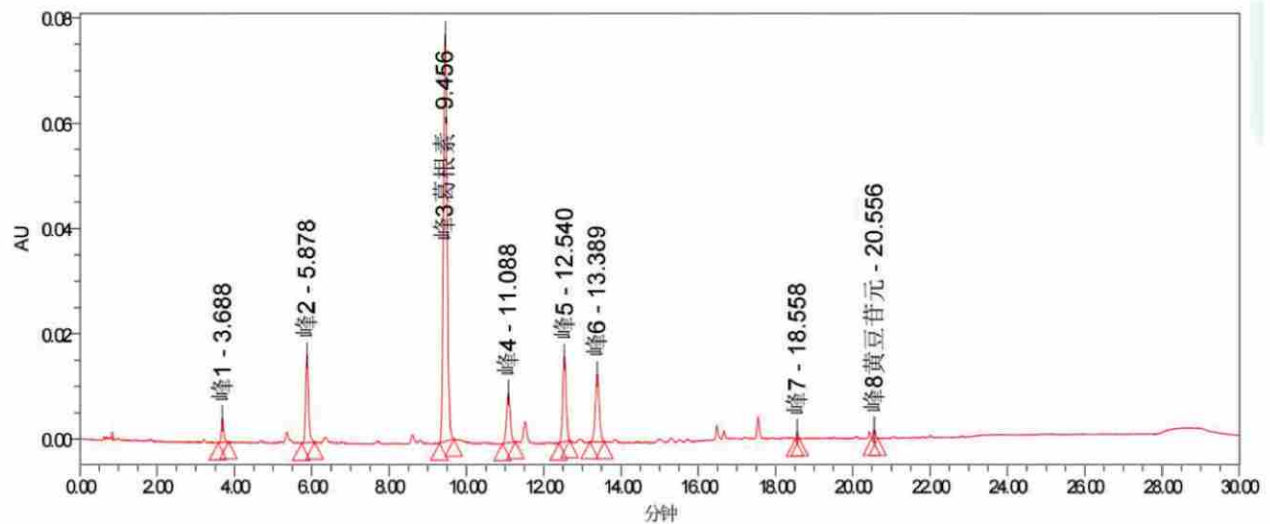
流速:0.4mL/min

柱温:30°C

流动相:A相:乙腈;B相:0.1%磷酸溶液

| 时间(分钟) | A% | B% |
|--------|----|----|
| 0      | 6  | 94 |
| 10     | 9  | 91 |
| 14     | 11 | 89 |
| 22     | 30 | 70 |
| 27     | 30 | 70 |

色谱图:



## 从分析到半制备无缝对接

XP系列有与分析柱键合相相同、分离选择性与性能一致的制备柱/半制备柱,可直接从HPLC放大到制备,并且可提供不同粒径、内径与长度选择,从而实现不同分离平台的转换。以甲苯为例,方法从5 $\mu$ m XP tC18分析柱转移到对应的10 $\mu$ m制备柱上,甲苯的保留时间、峰形、柱效都未有显著差异。

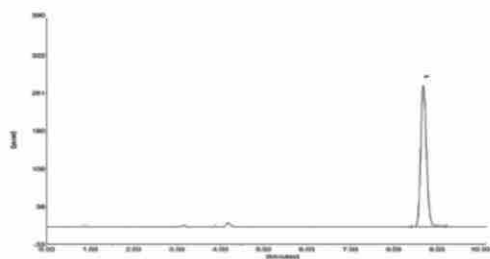
波长:254nm

流动相:70%乙腈/30%水

流速:与体积等比例

检测样品:甲苯

分析色谱柱:MicroPulite® XP tC18 4.6\*250mm 5 $\mu$ m



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

制备色谱柱:MicroPulite® XP tC18 30\*250mm 10 $\mu$ m



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

## MicroPulite®XP tC18 订购信息

| 可选粒径: 1.7 μm |               |
|--------------|---------------|
| 规格           | 货号 (P/N)      |
| 30x 2.1 mm   | XPtC18-032117 |
| 50x 2.1 mm   | XPtC18-052117 |
| 100x 2.1 mm  | XPtC18-102117 |
| 150x 2.1 mm  | XPtC18-152117 |
| 30x 3.0 mm   | XPtC18-033017 |
| 50x 3.0 mm   | XPtC18-053017 |
| 100x 3.0 mm  | XPtC18-103017 |
| 150x 3.0 mm  | XPtC18-153017 |

| 可选粒径: 2.5 μm |               |
|--------------|---------------|
| 规格           | 货号 (P/N)      |
| 30x 2.1 mm   | XPtC18-032125 |
| 50x 2.1 mm   | XPtC18-052125 |
| 100x 2.1 mm  | XPtC18-102125 |
| 150x 2.1 mm  | XPtC18-152125 |
| 30x 3.0 mm   | XPtC18-033025 |
| 50x 3.0 mm   | XPtC18-053025 |
| 100x 3.0 mm  | XPtC18-103025 |
| 150x 3.0 mm  | XPtC18-153025 |
| 250x 3.0 mm  | XPtC18-253025 |
| 30x 4.6 mm   | XPtC18-034625 |
| 50x 4.6 mm   | XPtC18-054625 |
| 100x 4.6 mm  | XPtC18-104625 |
| 150x 4.6 mm  | XPtC18-154625 |
| 200x 4.6 mm  | XPtC18-204625 |
| 250x 4.6 mm  | XPtC18-254625 |

| 可选粒径: 3 μm  |               |
|-------------|---------------|
| 规格          | 货号 (P/N)      |
| 30x 2.1 mm  | XPtC18-032130 |
| 50x 2.1 mm  | XPtC18-052130 |
| 100x 2.1 mm | XPtC18-102130 |
| 150x 2.1 mm | XPtC18-152130 |
| 30x 3.0 mm  | XPtC18-033030 |
| 50x 3.0 mm  | XPtC18-053030 |
| 100x 3.0 mm | XPtC18-103030 |
| 150x 3.0 mm | XPtC18-153030 |
| 250x 3.0 mm | XPtC18-253030 |
| 30x 4.6 mm  | XPtC18-034630 |
| 50x 4.6 mm  | XPtC18-054630 |
| 100x 4.6 mm | XPtC18-104630 |
| 150x 4.6 mm | XPtC18-154630 |
| 200x 4.6 mm | XPtC18-204630 |
| 250x 4.6 mm | XPtC18-254630 |

| 可选粒径: 3.5 μm |               |
|--------------|---------------|
| 规格           | 货号 (P/N)      |
| 30x 2.1 mm   | XPtC18-032135 |
| 50x 2.1 mm   | XPtC18-052135 |
| 100x 2.1 mm  | XPtC18-102135 |
| 150x 2.1 mm  | XPtC18-152135 |
| 30x 3.0 mm   | XPtC18-033035 |
| 50x 3.0 mm   | XPtC18-053035 |
| 100x 3.0 mm  | XPtC18-103035 |
| 150x 3.0 mm  | XPtC18-153035 |
| 250x 3.0 mm  | XPtC18-253035 |
| 30x 4.6 mm   | XPtC18-034635 |
| 50x 4.6 mm   | XPtC18-054635 |
| 100x 4.6 mm  | XPtC18-104635 |
| 150x 4.6 mm  | XPtC18-154635 |
| 200x 4.6 mm  | XPtC18-204635 |
| 250x 4.6 mm  | XPtC18-254635 |

| 可选粒径: 5 μm  |               |
|-------------|---------------|
| 规格          | 货号 (P/N)      |
| 30x 2.1 mm  | XPtC18-032150 |
| 50x 2.1 mm  | XPtC18-052150 |
| 100x 2.1 mm | XPtC18-102150 |
| 150x 2.1 mm | XPtC18-152150 |
| 30x 3.0 mm  | XPtC18-033050 |
| 50x 3.0 mm  | XPtC18-053050 |
| 100x 3.0 mm | XPtC18-103050 |
| 150x 3.0 mm | XPtC18-153050 |
| 250x 3.0 mm | XPtC18-253050 |
| 30x 4.6 mm  | XPtC18-034650 |
| 50x 4.6 mm  | XPtC18-054650 |
| 100x 4.6 mm | XPtC18-104650 |
| 150x 4.6 mm | XPtC18-154650 |
| 200x 4.6 mm | XPtC18-204650 |
| 250x 4.6 mm | XPtC18-254650 |

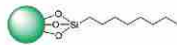
| 可选粒径: 5 μm   |                |
|--------------|----------------|
| 规格           | 货号 (P/N)       |
| 150x 10 mm   | XPtC18-1510050 |
| 250x 10 mm   | XPtC18-2510050 |
| 150x 20 mm   | XPtC18-1520050 |
| 250x 20 mm   | XPtC18-2520050 |
| 150x 21.2 mm | XPtC18-1521250 |
| 250x 21.2 mm | XPtC18-2521250 |
| 150x 30 mm   | XPtC18-1530050 |
| 250x 30 mm   | XPtC18-2530050 |
| 150x 50 mm   | XPtC18-1550050 |
| 250x 50 mm   | XPtC18-2550050 |

| 可选粒径: 7 μm   |                |
|--------------|----------------|
| 规格           | 货号 (P/N)       |
| 150x 10 mm   | XPtC18-1510070 |
| 250x 10 mm   | XPtC18-2510070 |
| 150x 20 mm   | XPtC18-1520070 |
| 250x 20 mm   | XPtC18-2520070 |
| 150x 21.2 mm | XPtC18-1521270 |
| 250x 21.2 mm | XPtC18-2521270 |
| 150x 30 mm   | XPtC18-1530070 |
| 250x 30 mm   | XPtC18-2530070 |
| 150x 50 mm   | XPtC18-1550070 |
| 250x 50 mm   | XPtC18-2550070 |

| 可选粒径: 10 μm  |                 |
|--------------|-----------------|
| 规格           | 货号 (P/N)        |
| 150x 10 mm   | XPtC18-15100100 |
| 250x 10 mm   | XPtC18-25100100 |
| 150x 20 mm   | XPtC18-15200100 |
| 250x 20 mm   | XPtC18-25200100 |
| 150x 21.2 mm | XPtC18-15212100 |
| 250x 21.2 mm | XPtC18-25212100 |
| 150x 30 mm   | XPtC18-15300100 |
| 250x 30 mm   | XPtC18-25300100 |
| 150x 50 mm   | XPtC18-15500100 |
| 250x 50 mm   | XPtC18-25500100 |

## MicroPulite® XP tC8 色谱柱

XP tC8 是能广泛适用于各种分析物通用的C8柱, 在pH1-12范围内使用, 并能为化合物提供良好的峰对称性、柱效和化学稳定性。

| 固定相 | 键合相                                                                               | 碳载量 | 比表面积 | 封端  | 孔径   | 可选粒径                         | USP分类 | pH范围 | 温度上限                            |
|-----|-----------------------------------------------------------------------------------|-----|------|-----|------|------------------------------|-------|------|---------------------------------|
| tC8 |  | 13% | 185  | Yes | 130Å | 1.7, 2.5, 3, 3.5, 5, 7, 10µm | L7    | 1-12 | 60°C (Low pH)<br>60°C (High pH) |

### ◆应用案例

#### 富马酸喹硫平片溶出度检测

色谱柱: MicroPulite® XP tC8 5µm 100\*4.6mm

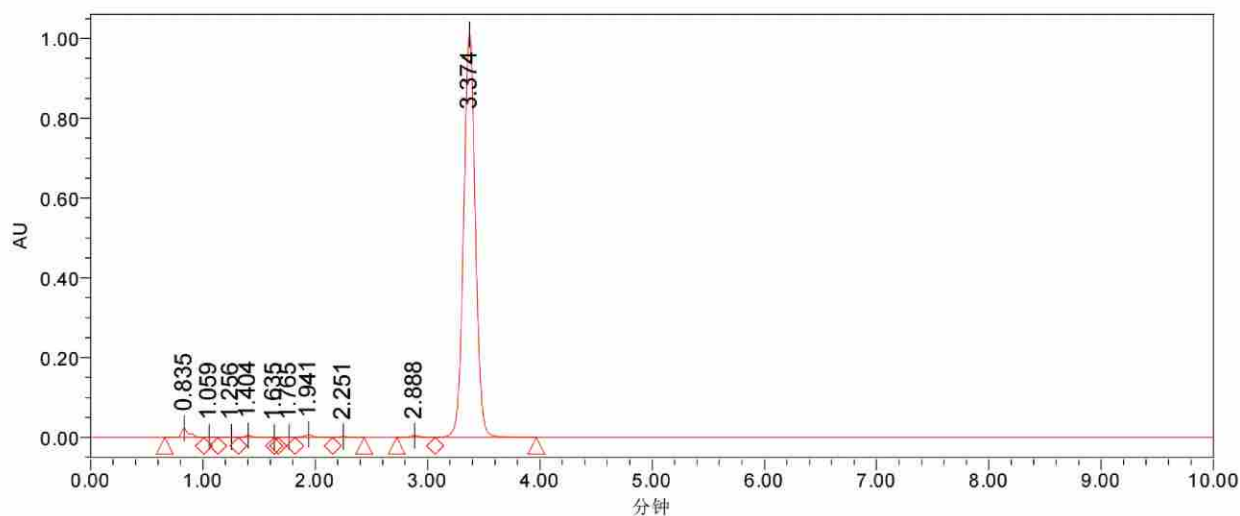
检测波长: UV 230nm

流速: 1.5mL/min

柱温: 30°C

流动相: 甲醇-乙腈-20mM磷酸氢二铵 (54: 7: 39)

色谱图:



## MicroPulite®XP tC8 订购信息

| 可选粒径: 1.7 µm |               |
|--------------|---------------|
| 规格           | 货号 (P/N)      |
| 30x 2.1 mm   | XPtC08-032117 |
| 50x 2.1 mm   | XPtC08-052117 |
| 100x 2.1 mm  | XPtC08-102117 |
| 150 x 2.1 mm | XPtC08-152117 |
| 30 x 3.0 mm  | XPtC08-033017 |
| 50 x 3.0 mm  | XPtC08-053017 |
| 100 x 3.0 mm | XPtC08-103017 |
| 150 x 3.0 mm | XPtC08-153017 |
|              |               |
|              |               |
|              |               |
|              |               |
|              |               |
|              |               |
|              |               |

| 可选粒径: 2.5 µm |               |
|--------------|---------------|
| 规格           | 货号 (P/N)      |
| 30x 2.1 mm   | XPtC08-032125 |
| 50x 2.1 mm   | XPtC08-052125 |
| 100x 2.1 mm  | XPtC08-102125 |
| 150 x 2.1 mm | XPtC08-152125 |
| 30 x 3.0 mm  | XPtC08-033025 |
| 50 x 3.0 mm  | XPtC08-053025 |
| 100 x 3.0 mm | XPtC08-103025 |
| 150 x 3.0 mm | XPtC08-153025 |
| 250 x 3.0 mm | XPtC08-253025 |
| 30 x 4.6 mm  | XPtC08-034625 |
| 50 x 4.6 mm  | XPtC08-054625 |
| 100 x 4.6 mm | XPtC08-104625 |
| 150 x 4.6 mm | XPtC08-154625 |
| 200 x 4.6 mm | XPtC08-204625 |
| 250 x 4.6 mm | XPtC08-254625 |

| 可选粒径: 3 µm   |               |
|--------------|---------------|
| 规格           | 货号 (P/N)      |
| 30x 2.1 mm   | XPtC08-032130 |
| 50x 2.1 mm   | XPtC08-052130 |
| 100x 2.1 mm  | XPtC08-102130 |
| 150 x 2.1 mm | XPtC08-152130 |
| 30 x 3.0 mm  | XPtC08-033030 |
| 50 x 3.0 mm  | XPtC08-053030 |
| 100 x 3.0 mm | XPtC08-103030 |
| 150 x 3.0 mm | XPtC08-153030 |
| 250 x 3.0 mm | XPtC08-253030 |
| 30 x 4.6 mm  | XPtC08-034630 |
| 50 x 4.6 mm  | XPtC08-054630 |
| 100 x 4.6 mm | XPtC08-104630 |
| 150 x 4.6 mm | XPtC08-154630 |
| 200 x 4.6 mm | XPtC08-204630 |
| 250 x 4.6 mm | XPtC08-254630 |

| 可选粒径: 3.5 µm |               |
|--------------|---------------|
| 规格           | 货号 (P/N)      |
| 30x 2.1 mm   | XPtC08-032135 |
| 50x 2.1 mm   | XPtC08-052135 |
| 100x 2.1 mm  | XPtC08-102135 |
| 150 x 2.1 mm | XPtC08-152135 |
| 30 x 3.0 mm  | XPtC08-033035 |
| 50 x 3.0 mm  | XPtC08-053035 |
| 100 x 3.0 mm | XPtC08-103035 |
| 150 x 3.0 mm | XPtC08-153035 |
| 250 x 3.0 mm | XPtC08-253035 |
| 30 x 4.6 mm  | XPtC08-034635 |
| 50 x 4.6 mm  | XPtC08-054635 |
| 100 x 4.6 mm | XPtC08-104635 |
| 150 x 4.6 mm | XPtC08-154635 |
| 200 x 4.6 mm | XPtC08-204635 |
| 250 x 4.6 mm | XPtC08-254635 |

| 可选粒径: 5 µm   |               |
|--------------|---------------|
| 规格           | 货号 (P/N)      |
| 30x 2.1 mm   | XPtC08-032150 |
| 50x 2.1 mm   | XPtC08-052150 |
| 100x 2.1 mm  | XPtC08-102150 |
| 150 x 2.1 mm | XPtC08-152150 |
| 30 x 3.0 mm  | XPtC08-033050 |
| 50 x 3.0 mm  | XPtC08-053050 |
| 100 x 3.0 mm | XPtC08-103050 |
| 150 x 3.0 mm | XPtC08-153050 |
| 250 x 3.0 mm | XPtC08-253050 |
| 30 x 4.6 mm  | XPtC08-034650 |
| 50 x 4.6 mm  | XPtC08-054650 |
| 100 x 4.6 mm | XPtC08-104650 |
| 150 x 4.6 mm | XPtC08-154650 |
| 200 x 4.6 mm | XPtC08-204650 |
| 250 x 4.6 mm | XPtC08-254650 |

| 可选粒径: 5 $\mu\text{m}$ |                |
|-----------------------|----------------|
| 规格                    | 货号 (P/N)       |
| 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 |

| 可选粒径: 7 $\mu\text{m}$ |                |
|-----------------------|----------------|
| 规格                    | 货号 (P/N)       |
| 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 |

| 可选粒径: 10 $\mu\text{m}$ |                 |
|------------------------|-----------------|
| 规格                     | 货号 (P/N)        |
| 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 色谱柱

XP tC4 是丁基硅烷键合杂化硅胶色谱柱, pH1-10范围内使用, 可用于小分子中强疏水性物质的分离, 也可用于大分子如蛋白的反相分析。

| 固定相 | 键合相                                                                               | 碳载量  | 比表面积 | 封端  | 孔径   | 可选粒径                         | USP分类 | pH范围 | 温度上限                            |
|-----|-----------------------------------------------------------------------------------|------|------|-----|------|------------------------------|-------|------|---------------------------------|
| tC4 |  | 9.5% | 185  | Yes | 130Å | 1.7, 2.5, 3, 3.5, 5, 7, 10µm | L26   | 1-10 | 80°C (Low pH)<br>50°C (High pH) |

### MicroPulite®XP tC4 订购信息

| 可选粒径: 1.7 µm |               | 可选粒径: 2.5 µm |               | 可选粒径: 3 µm  |               |
|--------------|---------------|--------------|---------------|-------------|---------------|
| 规格           | 货号 (P/N)      | 规格           | 货号 (P/N)      | 规格          | 货号 (P/N)      |
| 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 |
| 150x 2.1 mm  | XPtC04-152117 | 150x 2.1 mm  | XPtC04-152125 | 150x 2.1 mm | XPtC04-152130 |
| 30x 3.0 mm   | XPtC04-033017 | 30x 3.0 mm   | XPtC04-033025 | 30x 3.0 mm  | XPtC04-033030 |
| 50x 3.0 mm   | XPtC04-053017 | 50x 3.0 mm   | XPtC04-053025 | 50x 3.0 mm  | XPtC04-053030 |
| 100x 3.0 mm  | XPtC04-103017 | 100x 3.0 mm  | XPtC04-103025 | 100x 3.0 mm | XPtC04-103030 |
| 150x 3.0 mm  | XPtC04-153017 | 150x 3.0 mm  | XPtC04-153025 | 150x 3.0 mm | XPtC04-153030 |
|              |               | 250x 3.0 mm  | XPtC04-253025 | 250x 3.0 mm | XPtC04-253030 |
|              |               | 30x 4.6 mm   | XPtC04-034625 | 30x 4.6 mm  | XPtC04-034630 |
|              |               | 50x 4.6 mm   | XPtC04-054625 | 50x 4.6 mm  | XPtC04-054630 |
|              |               | 100x 4.6 mm  | XPtC04-104625 | 100x 4.6 mm | XPtC04-104630 |
|              |               | 150x 4.6 mm  | XPtC04-154625 | 150x 4.6 mm | XPtC04-154630 |
|              |               | 200x 4.6 mm  | XPtC04-204625 | 200x 4.6 mm | XPtC04-204630 |
|              |               | 250x 4.6 mm  | XPtC04-254625 | 250x 4.6 mm | XPtC04-254630 |
| 可选粒径: 3.5 µm |               | 可选粒径: 5 µm   |               |             |               |
| 规格           | 货号 (P/N)      | 规格           | 货号 (P/N)      |             |               |
| 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 |             |               |
| 150x 2.1 mm  | XPtC04-152135 | 150x 2.1 mm  | XPtC04-152150 |             |               |
| 30x 3.0 mm   | XPtC04-033035 | 30x 3.0 mm   | XPtC04-033050 |             |               |
| 50x 3.0 mm   | XPtC04-053035 | 50x 3.0 mm   | XPtC04-053050 |             |               |
| 100x 3.0 mm  | XPtC04-103035 | 100x 3.0 mm  | XPtC04-103050 |             |               |
| 150x 3.0 mm  | XPtC04-153035 | 150x 3.0 mm  | XPtC04-153050 |             |               |
| 250x 3.0 mm  | XPtC04-253035 | 250x 3.0 mm  | XPtC04-253050 |             |               |
| 30x 4.6 mm   | XPtC04-034635 | 30x 4.6 mm   | XPtC04-034650 |             |               |
| 50x 4.6 mm   | XPtC04-054635 | 50x 4.6 mm   | XPtC04-054650 |             |               |
| 100x 4.6 mm  | XPtC04-104635 | 100x 4.6 mm  | XPtC04-104650 |             |               |
| 150x 4.6 mm  | XPtC04-154635 | 150x 4.6 mm  | XPtC04-154650 |             |               |
| 200x 4.6 mm  | XPtC04-204635 | 200x 4.6 mm  | XPtC04-204650 |             |               |
| 250x 4.6 mm  | XPtC04-254635 | 250x 4.6 mm  | XPtC04-254650 |             |               |

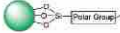
| 可选粒径: 5 $\mu\text{m}$ |                |
|-----------------------|----------------|
| 规格                    | 货号 (P/N)       |
| 150 x 10 mm           | XPtC04-1510050 |
| 250 x 10 mm           | XPtC04-2510050 |
| 150 x 20 mm           | XPtC04-1520050 |
| 250 x 20 mm           | XPtC04-2520050 |
| 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 |

| 可选粒径: 7 $\mu\text{m}$ |                |
|-----------------------|----------------|
| 规格                    | 货号 (P/N)       |
| 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 |

| 可选粒径: 10 $\mu\text{m}$ |                 |
|------------------------|-----------------|
| 规格                     | 货号 (P/N)        |
| 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 色谱柱

XP RP18和RP18 Plus的极性内嵌基团结构不同,但都是同样原理能使色谱柱兼容并耐受100%纯水。XP RP18采用的三键键合技术,降低了在高水相条件下键合相流失,延长了色谱柱的使用寿命。

| 固定相  | 键合相                                                                               | 碳载量 | 比表面积 | 封端  | 孔径   | 可选粒径                      | USP分类 | pH范围 | 温度上限                            |
|------|-----------------------------------------------------------------------------------|-----|------|-----|------|---------------------------|-------|------|---------------------------------|
| RP18 |  | 18% | 185  | Yes | 130Å | 1.7, 2.5, 3, 3.5, 5, 10µm | L1    | 2-11 | 50°C (Low pH)<br>45°C (High pH) |

### ◆应用案例

#### 木犀草素含量测定

色谱柱: MicroPulite® XP RP18 5µm 150\*4.6mm

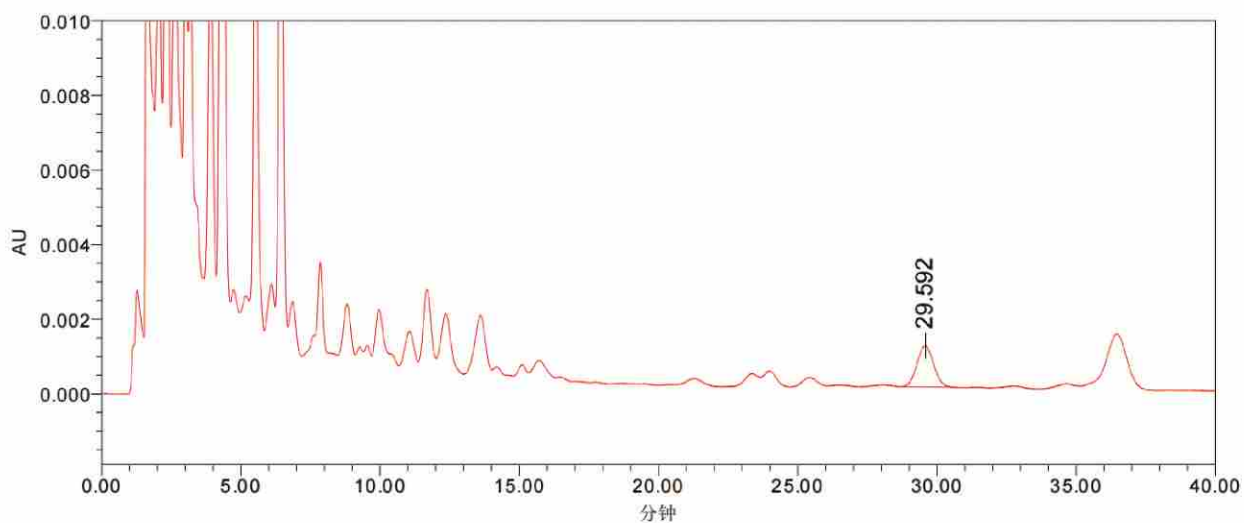
检测波长: UV 350nm

流速: 1.0mL/min

柱温: 40°C

流动相: 甲醇-0.1%磷酸溶液= (43:57)

色谱图:



## MicroPulite®XP RP18 订购信息

| 可选粒径: 1.7 µm |              |
|--------------|--------------|
| 规格           | 货号 (P/N)     |
| 30x 2.1 mm   | XPR18-032117 |
| 50x 2.1 mm   | XPR18-052117 |
| 100x 2.1 mm  | XPR18-102117 |
| 150x 2.1 mm  | XPR18-152117 |
| 30x 3.0 mm   | XPR18-033017 |
| 50x 3.0 mm   | XPR18-053017 |
| 100x 3.0 mm  | XPR18-103017 |
| 150x 3.0 mm  | XPR18-153017 |
|              |              |
|              |              |
|              |              |
|              |              |
|              |              |
|              |              |

| 可选粒径: 2.5 µm |              |
|--------------|--------------|
| 规格           | 货号 (P/N)     |
| 30x 2.1 mm   | XPR18-032125 |
| 50x 2.1 mm   | XPR18-052125 |
| 100x 2.1 mm  | XPR18-102125 |
| 150x 2.1 mm  | XPR18-152125 |
| 30x 3.0 mm   | XPR18-033025 |
| 50x 3.0 mm   | XPR18-053025 |
| 100x 3.0 mm  | XPR18-103025 |
| 150x 3.0 mm  | XPR18-153025 |
| 250x 3.0 mm  | XPR18-253025 |
| 30x 4.6 mm   | XPR18-034625 |
| 50x 4.6 mm   | XPR18-054625 |
| 100x 4.6 mm  | XPR18-104625 |
| 150x 4.6 mm  | XPR18-154625 |
| 200x 4.6 mm  | XPR18-204625 |
| 250x 4.6 mm  | XPR18-254625 |

| 可选粒径: 3 µm  |              |
|-------------|--------------|
| 规格          | 货号 (P/N)     |
| 30x 2.1 mm  | XPR18-032130 |
| 50x 2.1 mm  | XPR18-052130 |
| 100x 2.1 mm | XPR18-102130 |
| 150x 2.1 mm | XPR18-152130 |
| 30x 3.0 mm  | XPR18-033030 |
| 50x 3.0 mm  | XPR18-053030 |
| 100x 3.0 mm | XPR18-103030 |
| 150x 3.0 mm | XPR18-153030 |
| 250x 3.0 mm | XPR18-253030 |
| 30x 4.6 mm  | XPR18-034630 |
| 50x 4.6 mm  | XPR18-054630 |
| 100x 4.6 mm | XPR18-104630 |
| 150x 4.6 mm | XPR18-154630 |
| 200x 4.6 mm | XPR18-204630 |
| 250x 4.6 mm | XPR18-254630 |

| 可选粒径: 3.5 µm |              |
|--------------|--------------|
| 规格           | 货号 (P/N)     |
| 30x 2.1 mm   | XPR18-032135 |
| 50x 2.1 mm   | XPR18-052135 |
| 100x 2.1 mm  | XPR18-102135 |
| 150x 2.1 mm  | XPR18-152135 |
| 30x 3.0 mm   | XPR18-033035 |
| 50x 3.0 mm   | XPR18-053035 |
| 100x 3.0 mm  | XPR18-103035 |
| 150x 3.0 mm  | XPR18-153035 |
| 250x 3.0 mm  | XPR18-253035 |
| 30x 4.6 mm   | XPR18-034635 |
| 50x 4.6 mm   | XPR18-054635 |
| 100x 4.6 mm  | XPR18-104635 |
| 150x 4.6 mm  | XPR18-154635 |
| 200x 4.6 mm  | XPR18-204635 |
| 250x 4.6 mm  | XPR18-254635 |

| 可选粒径: 5 µm  |              |
|-------------|--------------|
| 规格          | 货号 (P/N)     |
| 30x 2.1 mm  | XPR18-032150 |
| 50x 2.1 mm  | XPR18-052150 |
| 100x 2.1 mm | XPR18-102150 |
| 150x 2.1 mm | XPR18-152150 |
| 30x 3.0 mm  | XPR18-033050 |
| 50x 3.0 mm  | XPR18-053050 |
| 100x 3.0 mm | XPR18-103050 |
| 150x 3.0 mm | XPR18-153050 |
| 250x 3.0 mm | XPR18-253050 |
| 30x 4.6 mm  | XPR18-034650 |
| 50x 4.6 mm  | XPR18-054650 |
| 100x 4.6 mm | XPR18-104650 |
| 150x 4.6 mm | XPR18-154650 |
| 200x 4.6 mm | XPR18-204650 |
| 250x 4.6 mm | XPR18-254650 |

| 可选粒径: 5 µm   |               |
|--------------|---------------|
| 规格           | 货号 (P/N)      |
| 150x 10 mm   | XPR18-1510050 |
| 250x 10 mm   | XPR18-2510050 |
| 150x 20 mm   | XPR18-1520050 |
| 250x 20 mm   | XPR18-2520050 |
| 150x 21.2 mm | XPR18-1521250 |
| 250x 21.2 mm | XPR18-2521250 |
| 150x 30 mm   | XPR18-1530050 |
| 250x 30 mm   | XPR18-2530050 |
| 150x 50 mm   | XPR18-1550050 |
| 250x 50 mm   | XPR18-2550050 |

| 可选粒径: 10 µm  |                |
|--------------|----------------|
| 规格           | 货号 (P/N)       |
| 150x 10 mm   | XPR18-15100100 |
| 250x 10 mm   | XPR18-25100100 |
| 150x 20 mm   | XPR18-15200100 |
| 250x 20 mm   | XPR18-25200100 |
| 150x 21.2 mm | XPR18-15212100 |
| 250x 21.2 mm | XPR18-25212100 |
| 150x 30 mm   | XPR18-15300100 |
| 250x 30 mm   | XPR18-25300100 |
| 150x 50 mm   | XPR18-15500100 |
| 250x 50 mm   | XPR18-25500100 |

## MicroPulite® XP RP18 Plus 色谱柱

在键合相中插入极性内嵌基团,XP RP18Plus能兼容并耐受100%水相,在pH2-12的范围内稳定。极性内嵌基团对填料上硅醇基也有屏蔽作用,从而为碱性化合物提供良好的峰形,XP RP18Plus 选择性也与XP tC18不同。

| 固定相       | 键合相                                                                                   | 碳载量 | 比表面积 | 封端   | 孔径                           | 可选粒径 | USP分类 | pH范围                            | 温度上限 |
|-----------|---------------------------------------------------------------------------------------|-----|------|------|------------------------------|------|-------|---------------------------------|------|
| RP18 Plus |  17% | 185 | Yes  | 130Å | 1.7, 2.5, 3, 3.5, 5, 7, 10µm | L1   | 2-11  | 50°C (Low pH)<br>45°C (High pH) |      |

### ◆应用案例

#### 替硝唑葡萄糖注射液中 5-羟甲基糠醛测定

色谱柱:MicroPulite® XP RP18 Plus 4.6\*250mm 5µm(货号:XPR18P-254650)

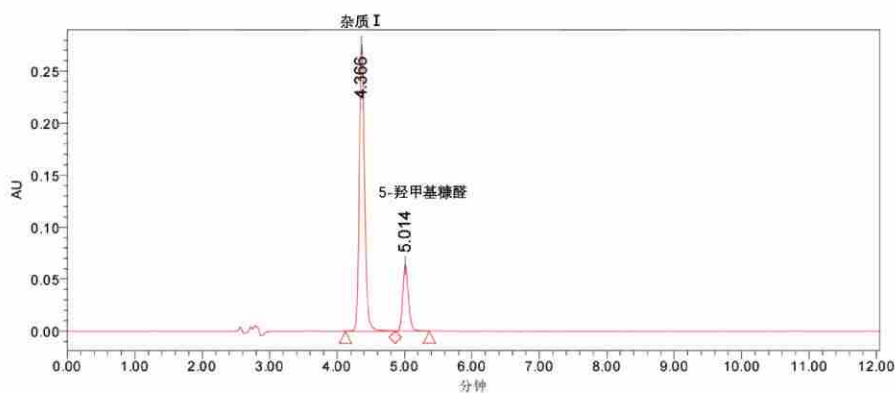
检测器:UV 284nm

流速:1mL/min

柱温:30°C

流动相:50mM 磷酸二氢钾(用磷酸调节 pH 至 3.5)-甲醇=(80:20)

色谱图:



## MicroPulite® XP RP18 Plus 订购信息

| 可选粒径: 1.7 µm |               |
|--------------|---------------|
| 规格           | 货号 (P/N)      |
| 30x 2.1 mm   | XPR18P-032117 |
| 50x 2.1 mm   | XPR18P-052117 |
| 100x 2.1 mm  | XPR18P-102117 |
| 150x 2.1 mm  | XPR18P-152117 |
| 30x 3.0 mm   | XPR18P-033017 |
| 50x 3.0 mm   | XPR18P-053017 |
| 100x 3.0 mm  | XPR18P-103017 |
| 150x 3.0 mm  | XPR18P-153017 |
|              |               |
|              |               |
|              |               |
|              |               |
|              |               |
|              |               |
|              |               |
|              |               |

| 可选粒径: 2.5 µm |               |
|--------------|---------------|
| 规格           | 货号 (P/N)      |
| 30x 2.1 mm   | XPR18P-032125 |
| 50x 2.1 mm   | XPR18P-052125 |
| 100x 2.1 mm  | XPR18P-102125 |
| 150x 2.1 mm  | XPR18P-152125 |
| 30x 3.0 mm   | XPR18P-033025 |
| 50x 3.0 mm   | XPR18P-053025 |
| 100x 3.0 mm  | XPR18P-103025 |
| 150x 3.0 mm  | XPR18P-153025 |
| 250x 3.0 mm  | XPR18P-253025 |
| 30x 4.6 mm   | XPR18P-034625 |
| 50x 4.6 mm   | XPR18P-054625 |
| 100x 4.6 mm  | XPR18P-104625 |
| 150x 4.6 mm  | XPR18P-154625 |
| 200x 4.6 mm  | XPR18P-204625 |
| 250x 4.6 mm  | XPR18P-254625 |

| 可选粒径: 3 µm  |               |
|-------------|---------------|
| 规格          | 货号 (P/N)      |
| 30x 2.1 mm  | XPR18P-032130 |
| 50x 2.1 mm  | XPR18P-052130 |
| 100x 2.1 mm | XPR18P-102130 |
| 150x 2.1 mm | XPR18P-152130 |
| 30x 3.0 mm  | XPR18P-033030 |
| 50x 3.0 mm  | XPR18P-053030 |
| 100x 3.0 mm | XPR18P-103030 |
| 150x 3.0 mm | XPR18P-153030 |
| 250x 3.0 mm | XPR18P-253030 |
| 30x 4.6 mm  | XPR18P-034630 |
| 50x 4.6 mm  | XPR18P-054630 |
| 100x 4.6 mm | XPR18P-104630 |
| 150x 4.6 mm | XPR18P-154630 |
| 200x 4.6 mm | XPR18P-204630 |
| 250x 4.6 mm | XPR18P-254630 |

| 可选粒径: 3.5 µm |               |
|--------------|---------------|
| 规格           | 货号 (P/N)      |
| 30x 2.1 mm   | XPR18P-032135 |
| 50x 2.1 mm   | XPR18P-052135 |
| 100x 2.1 mm  | XPR18P-102135 |
| 150x 2.1 mm  | XPR18P-152135 |
| 30x 3.0 mm   | XPR18P-033035 |
| 50x 3.0 mm   | XPR18P-053035 |
| 100x 3.0 mm  | XPR18P-103035 |
| 150x 3.0 mm  | XPR18P-153035 |
| 250x 3.0 mm  | XPR18P-253035 |
| 30x 4.6 mm   | XPR18P-034635 |
| 50x 4.6 mm   | XPR18P-054635 |
| 100x 4.6 mm  | XPR18P-104635 |
| 150x 4.6 mm  | XPR18P-154635 |
| 200x 4.6 mm  | XPR18P-204635 |
| 250x 4.6 mm  | XPR18P-254635 |

| 可选粒径: 5 µm  |               |
|-------------|---------------|
| 规格          | 货号 (P/N)      |
| 30x 2.1 mm  | XPR18P-032150 |
| 50x 2.1 mm  | XPR18P-052150 |
| 100x 2.1 mm | XPR18P-102150 |
| 150x 2.1 mm | XPR18P-152150 |
| 30x 3.0 mm  | XPR18P-033050 |
| 50x 3.0 mm  | XPR18P-053050 |
| 100x 3.0 mm | XPR18P-103050 |
| 150x 3.0 mm | XPR18P-153050 |
| 250x 3.0 mm | XPR18P-253050 |
| 30x 4.6 mm  | XPR18P-034650 |
| 50x 4.6 mm  | XPR18P-054650 |
| 100x 4.6 mm | XPR18P-104650 |
| 150x 4.6 mm | XPR18P-154650 |
| 200x 4.6 mm | XPR18P-204650 |
| 250x 4.6 mm | XPR18P-254650 |

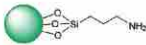
| 可选粒径: 5 µm    |                |
|---------------|----------------|
| 规格            | 货号 (P/N)       |
| 150 x 10 mm   | XPR18P-1510050 |
| 250 x 10 mm   | XPR18P-2510050 |
| 150 x 20 mm   | XPR18P-1520050 |
| 250 x 20 mm   | XPR18P-2520050 |
| 150 x 21.2 mm | XPR18P-1521250 |
| 250 x 21.2 mm | XPR18P-2521250 |
| 150 x 30 mm   | XPR18P-1530050 |
| 250 x 30 mm   | XPR18P-2530050 |
| 150 x 50 mm   | XPR18P-1550050 |
| 250 x 50 mm   | XPR18P-2550050 |

| 可选粒径: 7 µm    |                |
|---------------|----------------|
| 规格            | 货号 (P/N)       |
| 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 |

| 可选粒径: 10 µm   |                 |
|---------------|-----------------|
| 规格            | 货号 (P/N)        |
| 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 NH<sub>2</sub> 色谱柱

因氨基键合很容易从硅胶表面脱落, 延长氨基柱的使用寿命是一个重大的挑战。XP NH<sub>2</sub>采用杂化硅胶和三键键合技术, 在pH1-9范围内稳定, 大大延长了氨基柱的使用寿命, 可在正相和亲水作用模式下使用, 适用于糖类、类固醇类等化合物的分析。

| 固定相             | 键合相                                                                               | 碳载量 | 比表面积 | 封端 | 孔径   | 可选粒径     | USP分类 | pH范围 | 温度上限                            |
|-----------------|-----------------------------------------------------------------------------------|-----|------|----|------|----------|-------|------|---------------------------------|
| NH <sub>2</sub> |  | 9%  | 185  | No | 130Å | 3.5, 5µm | L8    | 1-9  | 45°C (Low pH)<br>45°C (High pH) |

### ◆应用案例

#### 硫酸氨基葡萄糖胶囊含量测定

色谱柱: MicroPulite® XP NH<sub>2</sub> 5µm 250\*4.6mm

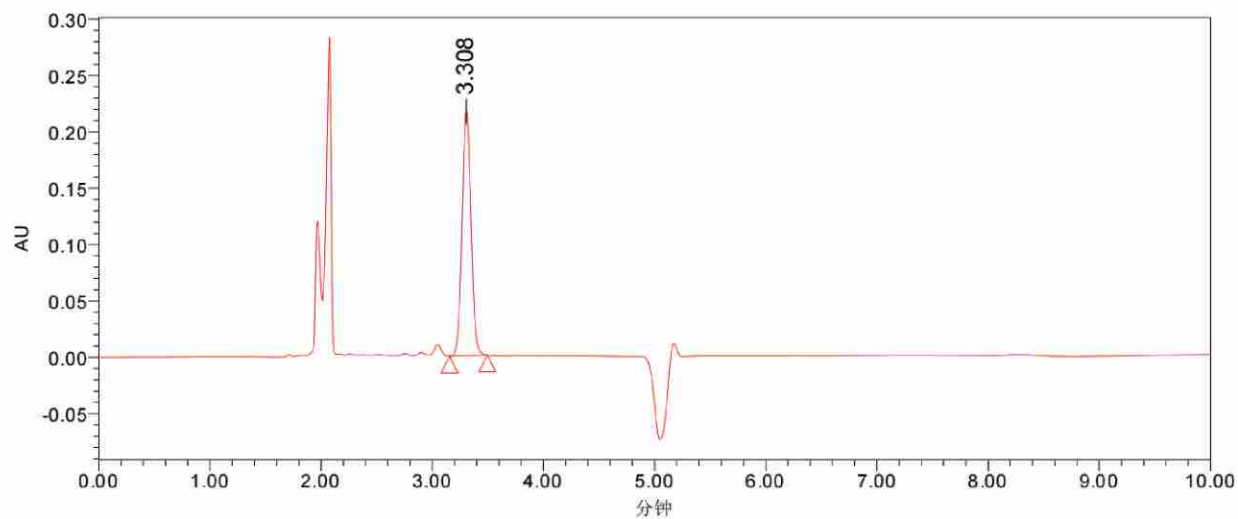
检测波长: UV 195nm

流速: 1.5mL/min

柱温: 35°C

流动相: 20mM磷酸二氢钾溶液 (磷酸调节pH至 7.5) - 乙腈= (35:65)

色谱图:



## MicorPulite® XP NH<sub>2</sub> 订购信息

| 可选粒径: 3.5 μm |             | 可选粒径: 5 μm  |             |
|--------------|-------------|-------------|-------------|
| 规格           | 货号 (P/N)    | 规格          | 货号 (P/N)    |
| 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 |
| 150x 2.1 mm  | XPNH-152135 | 150x 2.1 mm | XPNH-152150 |
| 30x 3.0 mm   | XPNH-033035 | 30x 3.0 mm  | XPNH-033050 |
| 50x 3.0 mm   | XPNH-053035 | 50x 3.0 mm  | XPNH-053050 |
| 100x 3.0 mm  | XPNH-103035 | 100x 3.0 mm | XPNH-103050 |
| 150x 3.0 mm  | XPNH-153035 | 150x 3.0 mm | XPNH-153050 |
| 250x 3.0 mm  | XPNH-253035 | 250x 3.0 mm | XPNH-253050 |
| 30x 4.6 mm   | XPNH-034635 | 30x 4.6 mm  | XPNH-034650 |
| 50x 4.6 mm   | XPNH-054635 | 50x 4.6 mm  | XPNH-054650 |
| 100x 4.6 mm  | XPNH-104635 | 100x 4.6 mm | XPNH-104650 |
| 150x 4.6 mm  | XPNH-154635 | 150x 4.6 mm | XPNH-154650 |
| 200x 4.6 mm  | XPNH-204635 | 200x 4.6 mm | XPNH-204650 |
| 250x 4.6 mm  | XPNH-254635 | 250x 4.6 mm | XPNH-254650 |

## MicroPulite® XP T3 色谱柱

XP T3采用三键键合技术,兼容并能耐受100%水相,在pH1-12范围内稳定,在增强极性化合物保留的同时又有杂化硅胶色谱柱的更长使用寿命。

| 固定相 | 键合相                                                                               | 碳载量 | 比表面积 | 封端  | 孔径   | 可选粒径         | USP分类 | pH范围 | 温度上限                            |
|-----|-----------------------------------------------------------------------------------|-----|------|-----|------|--------------|-------|------|---------------------------------|
| T3  |  | 14% | 185  | Yes | 130Å | 3.5,5,7,10µm | L1    | 1-12 | 80°C (Low pH)<br>60°C (High pH) |

### ◆应用案例

#### 水溶性维生素的检测

色谱柱:MicroPulite® XP T3 250\*4.6mm 5µm(货号:XPT3-254650)

检测器:UV 265nm

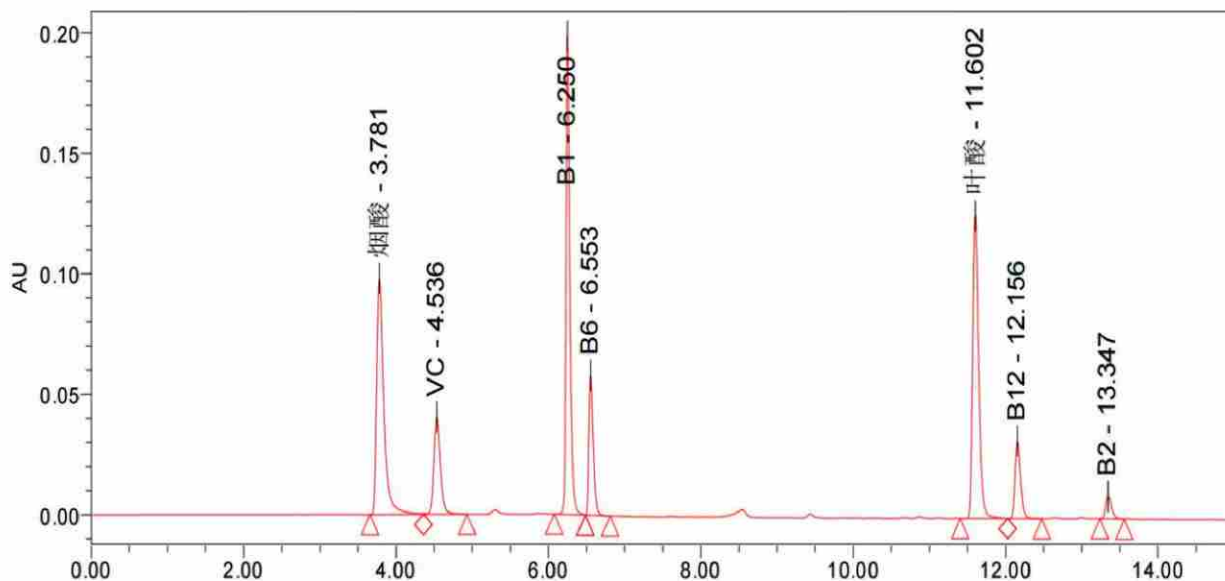
流速:1.0mL/min

柱温:30°C

流动相:A相:20mM 甲酸铵(pH3.0);B相:乙腈

| 时间(分钟) | A%  | B% |
|--------|-----|----|
| 0      | 100 | 0  |
| 15     | 70  | 30 |

色谱图:



## MicorPulite® XP T3 订购信息

| 可选粒径: 3.5 $\mu\text{m}$ |             |
|-------------------------|-------------|
| 规格                      | 货号 (P/N)    |
| 30x2.1 mm               | XPT3-032135 |
| 50x2.1 mm               | XPT3-052135 |
| 100x2.1 mm              | XPT3-102135 |
| 150x2.1 mm              | XPT3-152135 |
| 30x3.0 mm               | XPT3-033035 |
| 50x3.0 mm               | XPT3-053035 |
| 100x3.0 mm              | XPT3-103035 |
| 150x3.0 mm              | XPT3-153035 |
| 250x3.0 mm              | XPT3-253035 |
| 30x4.6 mm               | XPT3-034635 |
| 50x4.6 mm               | XPT3-054635 |
| 100x4.6 mm              | XPT3-104635 |
| 150x4.6 mm              | XPT3-154635 |
| 200x4.6 mm              | XPT3-204635 |
| 250x4.6 mm              | XPT3-254635 |

| 可选粒径: 5 $\mu\text{m}$ |             |
|-----------------------|-------------|
| 规格                    | 货号 (P/N)    |
| 30x2.1 mm             | XPT3-032150 |
| 50x2.1 mm             | XPT3-052150 |
| 100x2.1 mm            | XPT3-102150 |
| 150x2.1 mm            | XPT3-152150 |
| 30x3.0 mm             | XPT3-033050 |
| 50x3.0 mm             | XPT3-053050 |
| 100x3.0 mm            | XPT3-103050 |
| 150x3.0 mm            | XPT3-153050 |
| 250x3.0 mm            | XPT3-253050 |
| 30x4.6 mm             | XPT3-034650 |
| 50x4.6 mm             | XPT3-054650 |
| 100x4.6 mm            | XPT3-104650 |
| 150x4.6 mm            | XPT3-154650 |
| 200x4.6 mm            | XPT3-204650 |
| 250x4.6 mm            | XPT3-254650 |

| 可选粒径: 5 $\mu\text{m}$ |              |
|-----------------------|--------------|
| 规格                    | 货号 (P/N)     |
| 150x10 mm             | XPT3-1510050 |
| 250x10 mm             | XPT3-2510050 |
| 150x20 mm             | XPT3-1520050 |
| 250x20 mm             | XPT3-2520050 |
| 150x21.2 mm           | XPT3-1521250 |
| 250x21.2 mm           | XPT3-2521250 |
| 150x30 mm             | XPT3-1530050 |
| 250x30 mm             | XPT3-2530050 |
| 150x50 mm             | XPT3-1550050 |
| 250x50 mm             | XPT3-2550050 |

| 可选粒径: 7 $\mu\text{m}$ |              |
|-----------------------|--------------|
| 规格                    | 货号 (P/N)     |
| 150x10 mm             | XPT3-1510070 |
| 250x10 mm             | XPT3-2510070 |
| 150x20 mm             | XPT3-1520070 |
| 250x20 mm             | XPT3-2520070 |
| 150x21.2 mm           | XPT3-1521270 |
| 250x21.2 mm           | XPT3-2521270 |
| 150x30 mm             | XPT3-1530070 |
| 250x30 mm             | XPT3-2530070 |
| 150x50 mm             | XPT3-1550070 |
| 250x50 mm             | XPT3-2550070 |

| 可选粒径: 10 $\mu\text{m}$ |               |
|------------------------|---------------|
| 规格                     | 货号 (P/N)      |
| 150x10 mm              | XPT3-15100100 |
| 250x10 mm              | XPT3-25100100 |
| 150x20 mm              | XPT3-15200100 |
| 250x20 mm              | XPT3-25200100 |
| 150x21.2 mm            | XPT3-15212100 |
| 250x21.2 mm            | XPT3-25212100 |
| 150x30 mm              | XPT3-15300100 |
| 250x30 mm              | XPT3-25300100 |
| 150x50 mm              | XPT3-15500100 |
| 250x50 mm              | XPT3-25500100 |

## MicroPulite® XP Phenyl-Hexyl 色谱柱

XP Phenyl-Hexyl 是带有一个三键键合苯己基的苯基柱,与硅胶基质的苯基柱相比,pH耐受范围更宽 (pH1-12),键合相化学稳定性更好。XP Phenyl-Hexyl 提供与C18或C8等直链烷烃色谱柱不同的选择性,适用于芳香族化合物、胺类化合物的分析。

| 固定相          | 键合相                                                                               | 碳载量 | 比表面积 | 封端  | 孔径   | 可选粒径                      | USP分类 | pH范围 | 温度上限                            |
|--------------|-----------------------------------------------------------------------------------|-----|------|-----|------|---------------------------|-------|------|---------------------------------|
| Phenyl-Hexyl |  | 15% | 185  | Yes | 130Å | 1.7,2.5,3,3.5<br>5,7,10µm | L11   | 1-12 | 80°C (Low pH)<br>60°C (High pH) |

### ◆应用案例

#### 苯丝氨酸与相关杂质的分离

色谱柱: MicroPulite® XP Phenyl-Hexyl 5µm 250\*4.6mm

检测波长: UV 230nm

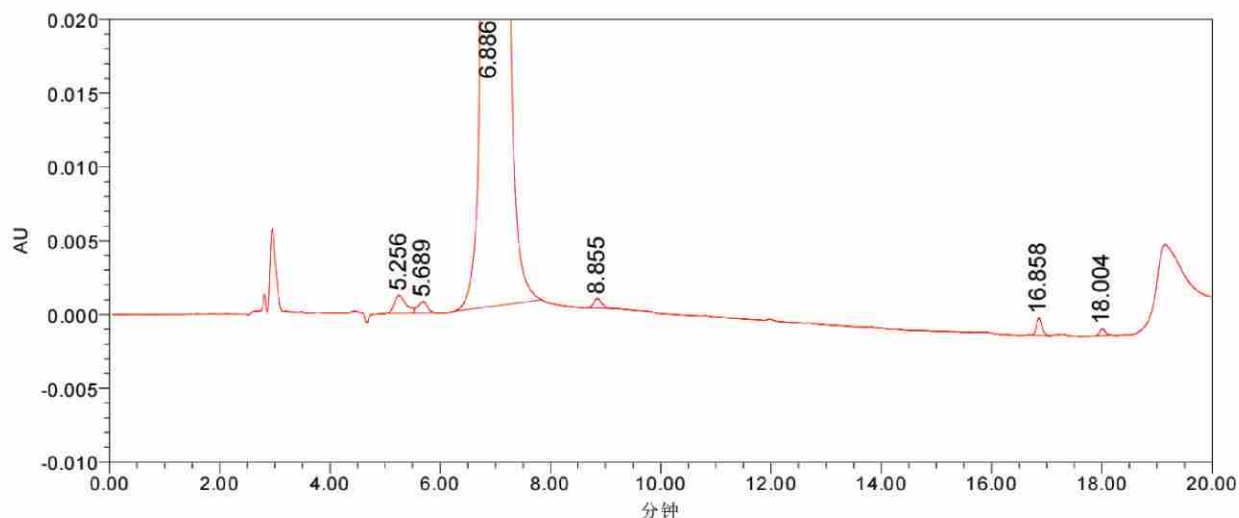
流速: 1.0mL/min

柱温: 30°C

流动相: A: 20mM磷酸氢二钠溶液(氢氧化钠调节pH至10); B: 甲醇

梯度洗脱: 0min:2%B; 5min:2%B; 15min:35%B; 15.1min:2%B; 20min:2%B.

色谱图:



## MicroPulite® XP Phenyl-Hexyl 订购信息

| 可选粒径: 1.7 $\mu\text{m}$ |             |
|-------------------------|-------------|
| 规格                      | 货号 (P/N)    |
| 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 |
|                         |             |
|                         |             |
|                         |             |
|                         |             |
|                         |             |
|                         |             |
|                         |             |

| 可选粒径: 2.5 $\mu\text{m}$ |             |
|-------------------------|-------------|
| 规格                      | 货号 (P/N)    |
| 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 |

| 可选粒径: 3 $\mu\text{m}$ |             |
|-----------------------|-------------|
| 规格                    | 货号 (P/N)    |
| 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 |

| 可选粒径: 3.5 $\mu\text{m}$ |             |
|-------------------------|-------------|
| 规格                      | 货号 (P/N)    |
| 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 |

| 可选粒径: 5 $\mu\text{m}$ |             |
|-----------------------|-------------|
| 规格                    | 货号 (P/N)    |
| 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 |

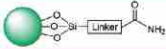
| 可选粒径: 5 $\mu\text{m}$ |              |
|-----------------------|--------------|
| 规格                    | 货号 (P/N)     |
| 150 x 10 mm           | XPPH-1510050 |
| 250 x 10 mm           | XPPH-2510050 |
| 150 x 20 mm           | XPPH-1520050 |
| 250 x 20 mm           | XPPH-2520050 |
| 150 x 21.2 mm         | 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 |

| 可选粒径: 7 $\mu\text{m}$ |              |
|-----------------------|--------------|
| 规格                    | 货号 (P/N)     |
| 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 |

| 可选粒径: 10 $\mu\text{m}$ |               |
|------------------------|---------------|
| 规格                     | 货号 (P/N)      |
| 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 色谱柱

XP Amide是用于亲水作用分离模式的色谱柱，以满足分析C18不能保留的强极性化合物的需求。基于杂化硅胶填料的Amide色谱柱，能在更宽泛的pH流动相下使用 (pH 2-11)，满足酸性、碱性、中性等强极性化合物的分离需求。

| 固定相   | 键合相                                                                               | 碳载量 | 比表面积 | 封端 | 孔径   | 可选粒径                           | USP分类 | pH范围 | 温度上限                            |
|-------|-----------------------------------------------------------------------------------|-----|------|----|------|--------------------------------|-------|------|---------------------------------|
| Amide |  | 12% | 185  | NO | 130Å | 1.7, 2.5, 3<br>3.5, 5, 7, 10µm | L68   | 2-11 | 90°C (Low pH)<br>90°C (High pH) |

## ◆应用案例

### Amide 柱分析糖类化合物

色谱柱:MicroPulite® XP Amide 4.6\*150mm 3.5µm(货号:XPA-154635)

检测器:ELSD

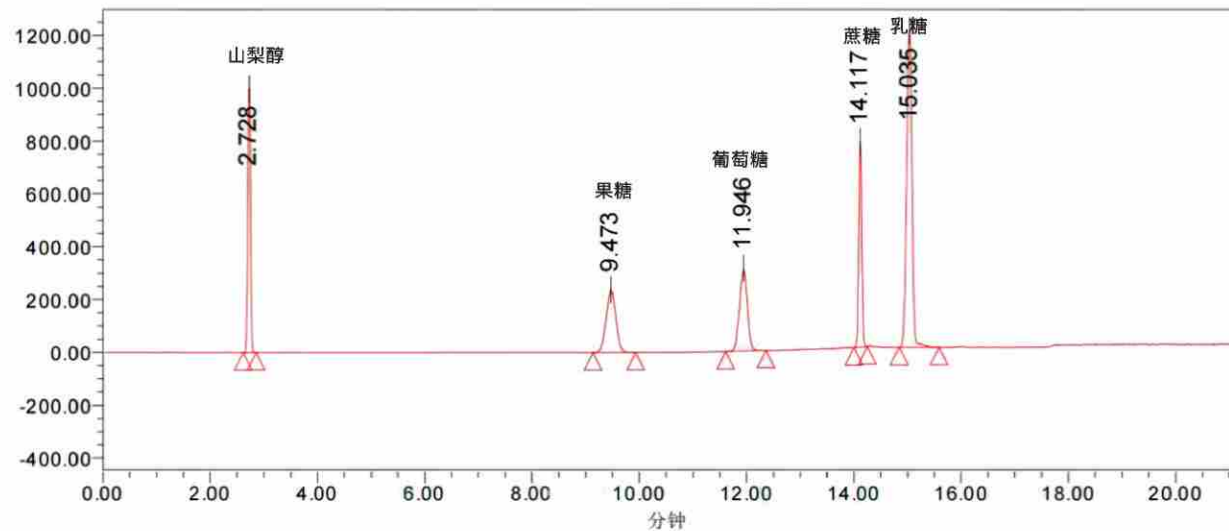
流速:1mL/min

柱温:50°C

流动相:A相:0.2%三乙胺溶液;B相:乙腈

| 时间(分钟) | A% | B% |
|--------|----|----|
| 0      | 10 | 90 |
| 6      | 10 | 90 |
| 11     | 30 | 70 |
| 20     | 30 | 70 |
| 21     | 10 | 90 |

色谱图:



## ◆应用案例

### 五种食用糖的检测

色谱柱: MicroPulite® XP Amide 3.5 $\mu$ m 250\*4.6mm

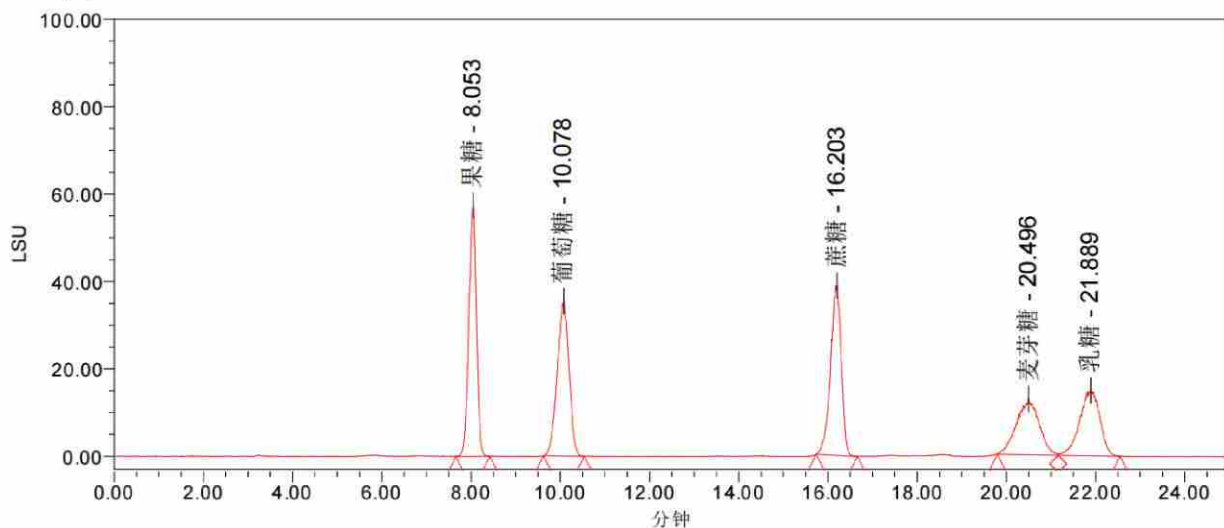
检测器: 蒸发光散射检测器

流速: 1.0mL/min

柱温: 50℃

流动相: 乙腈-50mM乙酸铵 (含0.5%三乙胺) = (80: 20)

色谱图:



### 肌肉肌醇(MI)与D-手性肌醇(DCI)的拆分

色谱柱: MicroPulite® XP Amide 5 $\mu$ m 250\*4.6mm

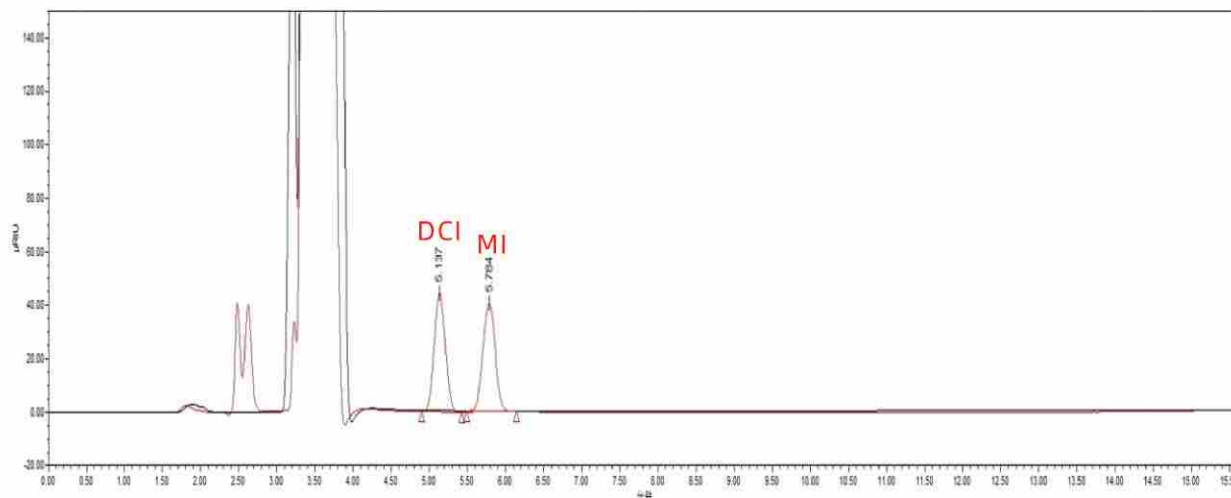
检测器: 示差折光检测器

流速: 1.0mL/min

柱温: 40℃

流动相: 甲醇-0.1%氨水溶液= (90:10)

色谱图:



## MicroPulite® XP Amide 订购信息

| 可选粒径: 1.7 μm |            |
|--------------|------------|
| 规格           | 货号 (P/N)   |
| 30x 2.1 mm   | XPA-032117 |
| 50x 2.1 mm   | XPA-052117 |
| 100x 2.1 mm  | XPA-102117 |
| 150x 2.1 mm  | XPA-152117 |
| 30x 3.0 mm   | XPA-033017 |
| 50x 3.0 mm   | XPA-053017 |
| 100x 3.0 mm  | XPA-103017 |
| 150x 3.0 mm  | XPA-153017 |
|              |            |
|              |            |
|              |            |
|              |            |
|              |            |
|              |            |
|              |            |

| 可选粒径: 2.5 μm |            |
|--------------|------------|
| 规格           | 货号 (P/N)   |
| 30x 2.1 mm   | XPA-032125 |
| 50x 2.1 mm   | XPA-052125 |
| 100x 2.1 mm  | XPA-102125 |
| 150x 2.1 mm  | XPA-152125 |
| 30x 3.0 mm   | XPA-033025 |
| 50x 3.0 mm   | XPA-053025 |
| 100x 3.0 mm  | XPA-103025 |
| 150x 3.0 mm  | XPA-153025 |
| 250x 3.0 mm  | XPA-253025 |
| 30x 4.6 mm   | XPA-034625 |
| 50x 4.6 mm   | XPA-054625 |
| 100x 4.6 mm  | XPA-104625 |
| 150x 4.6 mm  | XPA-154625 |
| 200x 4.6 mm  | XPA-204625 |
| 250x 4.6 mm  | XPA-254625 |

| 可选粒径: 3 μm  |            |
|-------------|------------|
| 规格          | 货号 (P/N)   |
| 30x 2.1 mm  | XPA-032130 |
| 50x 2.1 mm  | XPA-052130 |
| 100x 2.1 mm | XPA-102130 |
| 150x 2.1 mm | XPA-152130 |
| 30x 3.0 mm  | XPA-033030 |
| 50x 3.0 mm  | XPA-053030 |
| 100x 3.0 mm | XPA-103030 |
| 150x 3.0 mm | XPA-153030 |
| 250x 3.0 mm | XPA-253030 |
| 30x 4.6 mm  | XPA-034630 |
| 50x 4.6 mm  | XPA-054630 |
| 100x 4.6 mm | XPA-104630 |
| 150x 4.6 mm | XPA-154630 |
| 200x 4.6 mm | XPA-204630 |
| 250x 4.6 mm | XPA-254630 |

| 可选粒径: 3.5 μm |            |
|--------------|------------|
| 规格           | 货号 (P/N)   |
| 30x 2.1 mm   | XPA-032135 |
| 50x 2.1 mm   | XPA-052135 |
| 100x 2.1 mm  | XPA-102135 |
| 150x 2.1 mm  | XPA-152135 |
| 30x 3.0 mm   | XPA-033035 |
| 50x 3.0 mm   | XPA-053035 |
| 100x 3.0 mm  | XPA-103035 |
| 150x 3.0 mm  | XPA-153035 |
| 250x 3.0 mm  | XPA-253035 |
| 30x 4.6 mm   | XPA-034635 |
| 50x 4.6 mm   | XPA-054635 |
| 100x 4.6 mm  | XPA-104635 |
| 150x 4.6 mm  | XPA-154635 |
| 200x 4.6 mm  | XPA-204635 |
| 250x 4.6 mm  | XPA-254635 |

| 可选粒径: 5 μm  |            |
|-------------|------------|
| 规格          | 货号 (P/N)   |
| 30x 2.1 mm  | XPA-032150 |
| 50x 2.1 mm  | XPA-052150 |
| 100x 2.1 mm | XPA-102150 |
| 150x 2.1 mm | XPA-152150 |
| 30x 3.0 mm  | XPA-033050 |
| 50x 3.0 mm  | XPA-053050 |
| 100x 3.0 mm | XPA-103050 |
| 150x 3.0 mm | XPA-153050 |
| 250x 3.0 mm | XPA-253050 |
| 30x 4.6 mm  | XPA-034650 |
| 50x 4.6 mm  | XPA-054650 |
| 100x 4.6 mm | XPA-104650 |
| 150x 4.6 mm | XPA-154650 |
| 200x 4.6 mm | XPA-204650 |
| 250x 4.6 mm | XPA-254650 |

| 可选粒径: 5 μm   |             |
|--------------|-------------|
| 规格           | 货号 (P/N)    |
| 150x 10 mm   | XPA-1510050 |
| 250x 10 mm   | XPA-2510050 |
| 150x 20 mm   | XPA-1520050 |
| 250x 20 mm   | XPA-2520050 |
| 150x 21.2 mm | XPA-1521250 |
| 250x 21.2 mm | XPA-2521250 |
| 150x 30 mm   | XPA-1530050 |
| 250x 30 mm   | XPA-2530050 |
| 150x 50 mm   | XPA-1550050 |
| 250x 50 mm   | XPA-2550050 |

| 可选粒径: 7 μm   |             |
|--------------|-------------|
| 规格           | 货号 (P/N)    |
| 150x 10 mm   | XPA-1510070 |
| 250x 10 mm   | XPA-2510070 |
| 150x 20 mm   | XPA-1520070 |
| 250x 20 mm   | XPA-2520070 |
| 150x 21.2 mm | XPA-1521270 |
| 250x 21.2 mm | XPA-2521270 |
| 150x 30 mm   | XPA-1530070 |
| 250x 30 mm   | XPA-2530070 |
| 150x 50 mm   | XPA-1550070 |
| 250x 50 mm   | XPA-2550070 |

| 可选粒径: 10 μm  |              |
|--------------|--------------|
| 规格           | 货号 (P/N)     |
| 150x 10 mm   | XPA-15100100 |
| 250x 10 mm   | XPA-25100100 |
| 150x 20 mm   | XPA-15200100 |
| 250x 20 mm   | XPA-25200100 |
| 150x 21.2 mm | XPA-15212100 |
| 250x 21.2 mm | XPA-25212100 |
| 150x 30 mm   | XPA-15300100 |
| 250x 30 mm   | XPA-25300100 |
| 150x 50 mm   | XPA-15500100 |
| 250x 50 mm   | XPA-25500100 |

## MicroPulite® XP HILIC 色谱柱

未键合的杂化硅胶填料，在pH1-9范围内具有优良的化学稳定性，正相和亲水作用色谱条件下使用。用做亲水作用色谱，能增加极性化合物的保留，特别是极性碱性化合物、中性化合物。

| 固定相   | 键合相                                                                               | 碳载量 | 比表面积 | 封端 | 孔径   | 可选粒径                      | USP分类 | pH范围 | 温度上限                            |
|-------|-----------------------------------------------------------------------------------|-----|------|----|------|---------------------------|-------|------|---------------------------------|
| HILIC |  | -   | 185  | NO | 130Å | 1.7,2.5,3<br>3.5,5,7,10µm | L3    | 1-9  | 45°C (Low pH)<br>45°C (High pH) |

### ◆应用案例

#### 动物性食品中环丙氨嗪残留量的测定

方法:GB 31658.12-2021

色谱柱:MicroPulite® XP HILIC 2.1\*150mm 3.5µm (货号:XPB-152135)

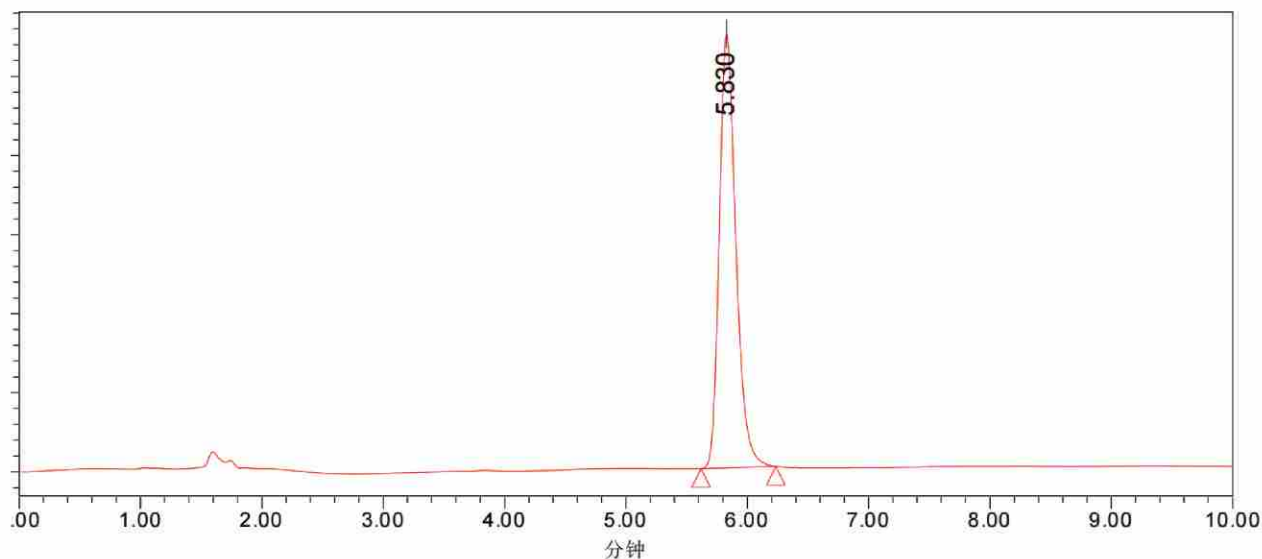
检测器:UV 214nm

流速:0.3mL/min

柱温:30°C

流动相:乙腈 - 25mM乙酸铵= (96 :4)

色谱图:



## MicroPulite® XP HILIC 订购信息

| 可选粒径: 1.7 $\mu\text{m}$ |            |
|-------------------------|------------|
| 规格                      | 货号 (P/N)   |
| 30x 2.1 mm              | XPB-032117 |
| 50x 2.1 mm              | XPB-052117 |
| 100x 2.1 mm             | XPB-102117 |
| 150x 2.1 mm             | XPB-152117 |
| 30x 3.0 mm              | XPB-033017 |
| 50x 3.0 mm              | XPB-053017 |
| 100x 3.0 mm             | XPB-103017 |
| 150x 3.0 mm             | XPB-153017 |
|                         |            |
|                         |            |
|                         |            |
|                         |            |
|                         |            |
|                         |            |
|                         |            |

| 可选粒径: 2.5 $\mu\text{m}$ |            |
|-------------------------|------------|
| 规格                      | 货号 (P/N)   |
| 30x 2.1 mm              | XPB-032125 |
| 50x 2.1 mm              | XPB-052125 |
| 100x 2.1 mm             | XPB-102125 |
| 150x 2.1 mm             | XPB-152125 |
| 30x 3.0 mm              | XPB-033025 |
| 50x 3.0 mm              | XPB-053025 |
| 100x 3.0 mm             | XPB-103025 |
| 150x 3.0 mm             | XPB-153025 |
| 250x 3.0 mm             | XPB-253025 |
| 30x 4.6 mm              | XPB-034625 |
| 50x 4.6 mm              | XPB-054625 |
| 100x 4.6 mm             | XPB-104625 |
| 150x 4.6 mm             | XPB-154625 |
| 200x 4.6 mm             | XPB-204625 |
| 250x 4.6 mm             | XPB-254625 |

| 可选粒径: 3 $\mu\text{m}$ |            |
|-----------------------|------------|
| 规格                    | 货号 (P/N)   |
| 30x 2.1 mm            | XPB-032130 |
| 50x 2.1 mm            | XPB-052130 |
| 100x 2.1 mm           | XPB-102130 |
| 150x 2.1 mm           | XPB-152130 |
| 30x 3.0 mm            | XPB-033030 |
| 50x 3.0 mm            | XPB-053030 |
| 100x 3.0 mm           | XPB-103030 |
| 150x 3.0 mm           | XPB-153030 |
| 250x 3.0 mm           | XPB-253030 |
| 30x 4.6 mm            | XPB-034630 |
| 50x 4.6 mm            | XPB-054630 |
| 100x 4.6 mm           | XPB-104630 |
| 150x 4.6 mm           | XPB-154630 |
| 200x 4.6 mm           | XPB-204630 |
| 250x 4.6 mm           | XPB-254630 |

| 可选粒径: 3.5 $\mu\text{m}$ |            |
|-------------------------|------------|
| 规格                      | 货号 (P/N)   |
| 30x 2.1 mm              | XPB-032135 |
| 50x 2.1 mm              | XPB-052135 |
| 100x 2.1 mm             | XPB-102135 |
| 150x 2.1 mm             | XPB-152135 |
| 30x 3.0 mm              | XPB-033035 |
| 50x 3.0 mm              | XPB-053035 |
| 100x 3.0 mm             | XPB-103035 |
| 150x 3.0 mm             | XPB-153035 |
| 250x 3.0 mm             | XPB-253035 |
| 30x 4.6 mm              | XPB-034635 |
| 50x 4.6 mm              | XPB-054635 |
| 100x 4.6 mm             | XPB-104635 |
| 150x 4.6 mm             | XPB-154635 |
| 200x 4.6 mm             | XPB-204635 |
| 250x 4.6 mm             | XPB-254635 |

| 可选粒径: 5 $\mu\text{m}$ |            |
|-----------------------|------------|
| 规格                    | 货号 (P/N)   |
| 30x 2.1 mm            | XPB-032150 |
| 50x 2.1 mm            | XPB-052150 |
| 100x 2.1 mm           | XPB-102150 |
| 150x 2.1 mm           | XPB-152150 |
| 30x 3.0 mm            | XPB-033050 |
| 50x 3.0 mm            | XPB-053050 |
| 100x 3.0 mm           | XPB-103050 |
| 150x 3.0 mm           | XPB-153050 |
| 250x 3.0 mm           | XPB-253050 |
| 30x 4.6 mm            | XPB-034650 |
| 50x 4.6 mm            | XPB-054650 |
| 100x 4.6 mm           | XPB-104650 |
| 150x 4.6 mm           | XPB-154650 |
| 200x 4.6 mm           | XPB-204650 |
| 250x 4.6 mm           | XPB-254650 |

| 可选粒径: 5 $\mu\text{m}$ |             |
|-----------------------|-------------|
| 规格                    | 货号 (P/N)    |
| 150x 10 mm            | XPB-1510050 |
| 250x 10 mm            | XPB-2510050 |
| 150x 20 mm            | XPB-1520050 |
| 250x 20 mm            | XPB-2520050 |
| 150x 21.2 mm          | XPB-1521250 |
| 250x 21.2 mm          | XPB-2521250 |
| 150x 30 mm            | XPB-1530050 |
| 250x 30 mm            | XPB-2530050 |
| 150x 50 mm            | XPB-1550050 |
| 250x 50 mm            | XPB-2550050 |

| 可选粒径: 7 $\mu\text{m}$ |             |
|-----------------------|-------------|
| 规格                    | 货号 (P/N)    |
| 150x 10 mm            | XPB-1510070 |
| 250x 10 mm            | XPB-2510070 |
| 150x 20 mm            | XPB-1520070 |
| 250x 20 mm            | XPB-2520070 |
| 150x 21.2 mm          | XPB-1521270 |
| 250x 21.2 mm          | XPB-2521270 |
| 150x 30 mm            | XPB-1530070 |
| 250x 30 mm            | XPB-2530070 |
| 150x 50 mm            | XPB-1550070 |
| 250x 50 mm            | XPB-2550070 |

| 可选粒径: 10 $\mu\text{m}$ |              |
|------------------------|--------------|
| 规格                     | 货号 (P/N)     |
| 150x 10 mm             | XPB-15100100 |
| 250x 10 mm             | XPB-25100100 |
| 150x 20 mm             | XPB-15200100 |
| 250x 20 mm             | XPB-25200100 |
| 150x 21.2 mm           | XPB-15212100 |
| 250x 21.2 mm           | XPB-25212100 |
| 150x 30 mm             | XPB-15300100 |
| 250x 30 mm             | XPB-25300100 |
| 150x 50 mm             | XPB-15500100 |
| 250x 50 mm             | XPB-25500100 |

## MicroPulite® XP Oligo tC18 色谱柱

杂化硅胶填料对高温、高pH、高浓度缓冲盐体系都有良好的耐受性,XP Oligo tC18 能满足寡核苷酸反相分析严苛的流动相和柱温的要求,是寡核苷酸分析反相色谱柱的首选。

| 固定相        | 键合相                                                                               | 碳载量 | 比表面积 | 封端  | 孔径   | 可选粒径                      | USP分类 | pH范围 | 温度上限                            |
|------------|-----------------------------------------------------------------------------------|-----|------|-----|------|---------------------------|-------|------|---------------------------------|
| Oligo tC18 |  | 18% | 185  | Yes | 130Å | 1.7,2.5,3<br>3.5,5,7,10µm | L1    | 1-12 | 80°C (Low pH)<br>60°C (High pH) |

### MicroPulite® XP Oligo tC18 订购信息

| 可选粒径: 1.7 µm |                | 可选粒径: 2.5 µm |                | 可选粒径: 3 µm  |                |
|--------------|----------------|--------------|----------------|-------------|----------------|
| 规格           | 货号 (P/N)       | 规格           | 货号 (P/N)       | 规格          | 货号 (P/N)       |
| 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 |
| 150x 2.1 mm  | XPOtC18-152117 | 150x 2.1 mm  | XPOtC18-152125 | 150x 2.1 mm | XPOtC18-152130 |
| 30x 3.0 mm   | XPOtC18-033017 | 30x 3.0 mm   | XPOtC18-033025 | 30x 3.0 mm  | XPOtC18-033030 |
| 50x 3.0 mm   | XPOtC18-053017 | 50x 3.0 mm   | XPOtC18-053025 | 50x 3.0 mm  | XPOtC18-053030 |
| 100x 3.0 mm  | XPOtC18-103017 | 100x 3.0 mm  | XPOtC18-103025 | 100x 3.0 mm | XPOtC18-103030 |
| 150x 3.0 mm  | XPOtC18-153017 | 150x 3.0 mm  | XPOtC18-153025 | 150x 3.0 mm | XPOtC18-153030 |
|              |                | 250x 3.0 mm  | XPOtC18-253025 | 250x 3.0 mm | XPOtC18-253030 |
|              |                | 30x 4.6 mm   | XPOtC18-034625 | 30x 4.6 mm  | XPOtC18-034630 |
|              |                | 50x 4.6 mm   | XPOtC18-054625 | 50x 4.6 mm  | XPOtC18-054630 |
|              |                | 100x 4.6 mm  | XPOtC18-104625 | 100x 4.6 mm | XPOtC18-104630 |
|              |                | 150x 4.6 mm  | XPOtC18-154625 | 150x 4.6 mm | XPOtC18-154630 |
|              |                | 200x 4.6 mm  | XPOtC18-204625 | 200x 4.6 mm | XPOtC18-204630 |
|              |                | 250x 4.6 mm  | XPOtC18-254625 | 250x 4.6 mm | XPOtC18-254630 |
| 可选粒径: 3.5 µm |                | 可选粒径: 5 µm   |                |             |                |
| 规格           | 货号 (P/N)       | 规格           | 货号 (P/N)       |             |                |
| 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 |             |                |
| 150x 2.1 mm  | XPOtC18-152135 | 150x 2.1 mm  | XPOtC18-152150 |             |                |
| 30x 3.0 mm   | XPOtC18-033035 | 30x 3.0 mm   | XPOtC18-033050 |             |                |
| 50x 3.0 mm   | XPOtC18-053035 | 50x 3.0 mm   | XPOtC18-053050 |             |                |
| 100x 3.0 mm  | XPOtC18-103035 | 100x 3.0 mm  | XPOtC18-103050 |             |                |
| 150x 3.0 mm  | XPOtC18-153035 | 150x 3.0 mm  | XPOtC18-153050 |             |                |
| 250x 3.0 mm  | XPOtC18-253035 | 250x 3.0 mm  | XPOtC18-253050 |             |                |
| 30x 4.6 mm   | XPOtC18-034635 | 30x 4.6 mm   | XPOtC18-034650 |             |                |
| 50x 4.6 mm   | XPOtC18-054635 | 50x 4.6 mm   | XPOtC18-054650 |             |                |
| 100x 4.6 mm  | XPOtC18-104635 | 100x 4.6 mm  | XPOtC18-104650 |             |                |
| 150x 4.6 mm  | XPOtC18-154635 | 150x 4.6 mm  | XPOtC18-154650 |             |                |
| 200x 4.6 mm  | XPOtC18-204635 | 200x 4.6 mm  | XPOtC18-204650 |             |                |
| 250x 4.6 mm  | XPOtC18-254635 | 250x 4.6 mm  | XPOtC18-254650 |             |                |

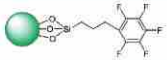
| 可选粒径: 5 $\mu\text{m}$ |                 |
|-----------------------|-----------------|
| 规格                    | 货号 (P/N)        |
| 150 x 10 mm           | XPOtC18-1510050 |
| 250 x 10 mm           | XPOtC18-2510050 |
| 150 x 20 mm           | XPOtC18-1520050 |
| 250 x 20 mm           | XPOtC18-2520050 |
| 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 |

| 可选粒径: 7 $\mu\text{m}$ |                 |
|-----------------------|-----------------|
| 规格                    | 货号 (P/N)        |
| 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 |

| 可选粒径: 10 $\mu\text{m}$ |                 |
|------------------------|-----------------|
| 规格                     | 货号 (P/N)        |
| 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 色谱柱

五氟苯基丙基硅烷键合杂化硅胶色谱柱, 在增强极性化合物保留的同时, 也提供与C18\Phenyl-Hexyl不同的选择, 适用于芳香族化合物、卤代化合物、平面位置异构体等的分析。

| 固定相     | 键合相                                                                               | 碳载量 | 比表面积 | 封端 | 孔径   | 可选粒径                           | USP分类 | pH范围 | 温度上限                            |
|---------|-----------------------------------------------------------------------------------|-----|------|----|------|--------------------------------|-------|------|---------------------------------|
| XP tPFP |  | 7%  | 185  | No | 130Å | 1.7, 2.5, 3<br>3.5, 5, 7, 10µm | L43   | 1-8  | 45°C (Low pH)<br>45°C (High pH) |

### ◆应用案例

#### 乙基位置异构体的分离

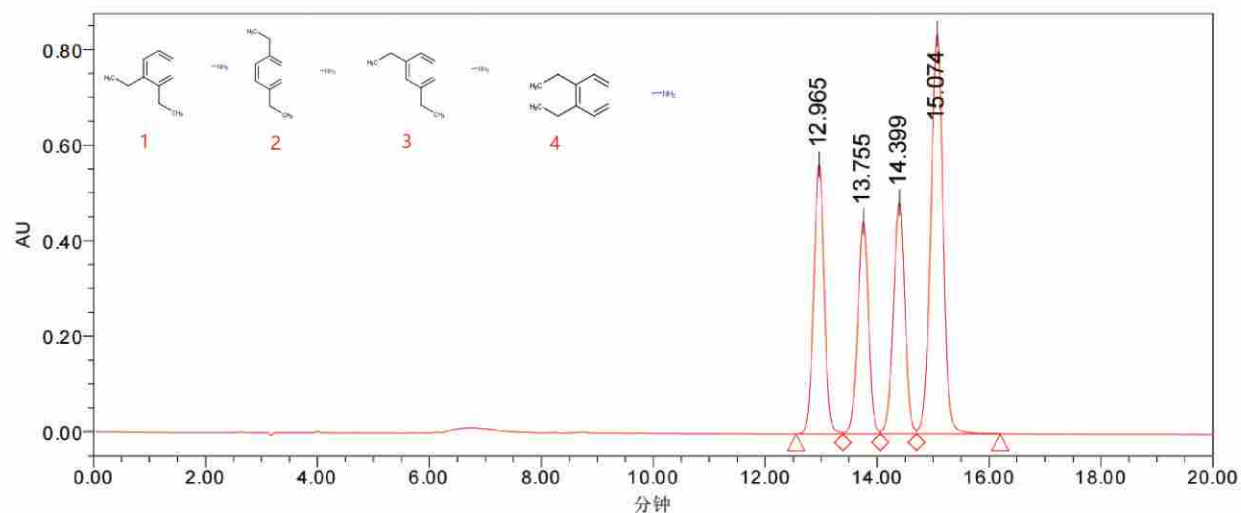
色谱柱: MicroPulite® XP tPFP 3.5µm 250\*4.6mm

检测波长: UV 210nm

流速: 1.0mL/min

柱温: 40°C

色谱图:



## MicorPulite® XP tPFP 订购信息

| 可选粒径:1.7μm  |               |
|-------------|---------------|
| 规格          | 货号 (P/N)      |
| 30x 2.1 mm  | XPtPFP-032117 |
| 50x 2.1 mm  | XPtPFP-052117 |
| 100x 2.1 mm | XPtPFP-102117 |
| 150x 2.1 mm | XPtPFP-152117 |
| 30x 3.0 mm  | XPtPFP-033017 |
| 50x 3.0 mm  | XPtPFP-053017 |
| 100x 3.0 mm | XPtPFP-103017 |
| 150x 3.0 mm | XPtPFP-153017 |
|             |               |
|             |               |
|             |               |
|             |               |
|             |               |
|             |               |

| 可选粒径:2.5μm  |               |
|-------------|---------------|
| 规格          | 货号 (P/N)      |
| 30x 2.1 mm  | XPtPFP-032125 |
| 50x 2.1 mm  | XPtPFP-052125 |
| 100x 2.1 mm | XPtPFP-102125 |
| 150x 2.1 mm | XPtPFP-152125 |
| 30x 3.0 mm  | XPtPFP-033025 |
| 50x 3.0 mm  | XPtPFP-053025 |
| 100x 3.0 mm | XPtPFP-103025 |
| 150x 3.0 mm | XPtPFP-153025 |
| 250x 3.0 mm | XPtPFP-253025 |
| 30x 4.6 mm  | XPtPFP-034625 |
| 50x 4.6 mm  | XPtPFP-054625 |
| 100x 4.6 mm | XPtPFP-104625 |
| 150x 4.6 mm | XPtPFP-154625 |
| 200x 4.6 mm | XPtPFP-204625 |
| 250x 4.6 mm | XPtPFP-254625 |

| 可选粒径:3μm    |               |
|-------------|---------------|
| 规格          | 货号 (P/N)      |
| 30x 2.1 mm  | XPtPFP-032130 |
| 50x 2.1 mm  | XPtPFP-052130 |
| 100x 2.1 mm | XPtPFP-102130 |
| 150x 2.1 mm | XPtPFP-152130 |
| 30x 3.0 mm  | XPtPFP-033030 |
| 50x 3.0 mm  | XPtPFP-053030 |
| 100x 3.0 mm | XPtPFP-103030 |
| 150x 3.0 mm | XPtPFP-153030 |
| 250x 3.0 mm | XPtPFP-253030 |
| 30x 4.6 mm  | XPtPFP-034630 |
| 50x 4.6 mm  | XPtPFP-054630 |
| 100x 4.6 mm | XPtPFP-104630 |
| 150x 4.6 mm | XPtPFP-154630 |
| 200x 4.6 mm | XPtPFP-204630 |
| 250x 4.6 mm | XPtPFP-254630 |

| 可选粒径:3.5μm  |               |
|-------------|---------------|
| 规格          | 货号 (P/N)      |
| 30x 2.1 mm  | XPtPFP-032135 |
| 50x 2.1 mm  | XPtPFP-052135 |
| 100x 2.1 mm | XPtPFP-102135 |
| 150x 2.1 mm | XPtPFP-152135 |
| 30x 3.0 mm  | XPtPFP-033035 |
| 50x 3.0 mm  | XPtPFP-053035 |
| 100x 3.0 mm | XPtPFP-103035 |
| 150x 3.0 mm | XPtPFP-153035 |
| 250x 3.0 mm | XPtPFP-253035 |
| 30x 4.6 mm  | XPtPFP-034635 |
| 50x 4.6 mm  | XPtPFP-054635 |
| 100x 4.6 mm | XPtPFP-104635 |
| 150x 4.6 mm | XPtPFP-154635 |
| 200x 4.6 mm | XPtPFP-204635 |
| 250x 4.6 mm | XPtPFP-254635 |

| 可选粒径:5μm    |               |
|-------------|---------------|
| 规格          | 货号 (P/N)      |
| 30x 2.1 mm  | XPtPFP-032150 |
| 50x 2.1 mm  | XPtPFP-052150 |
| 100x 2.1 mm | XPtPFP-102150 |
| 150x 2.1 mm | XPtPFP-152150 |
| 30x 3.0 mm  | XPtPFP-033050 |
| 50x 3.0 mm  | XPtPFP-053050 |
| 100x 3.0 mm | XPtPFP-103050 |
| 150x 3.0 mm | XPtPFP-153050 |
| 250x 3.0 mm | XPtPFP-253050 |
| 30x 4.6 mm  | XPtPFP-034650 |
| 50x 4.6 mm  | XPtPFP-054650 |
| 100x 4.6 mm | XPtPFP-104650 |
| 150x 4.6 mm | XPtPFP-154650 |
| 200x 4.6 mm | XPtPFP-204650 |
| 250x 4.6 mm | XPtPFP-254650 |

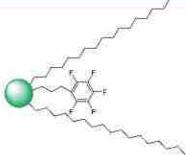
| 可选粒径:5μm     |                |
|--------------|----------------|
| 规格           | 货号 (P/N)       |
| 150x 10 mm   | XPtPFP-1510050 |
| 250x 10 mm   | XPtPFP-2510050 |
| 150x 20 mm   | XPtPFP-1520050 |
| 250x 20 mm   | XPtPFP-2520050 |
| 150x 21.2 mm | XPtPFP-1521250 |
| 250x 21.2 mm | XPtPFP-2521250 |
| 150x 30 mm   | XPtPFP-1530050 |
| 250x 30 mm   | XPtPFP-2530050 |
| 150x 50 mm   | XPtPFP-1550050 |
| 250x 50 mm   | XPtPFP-2550050 |

| 可选粒径:7μm     |                |
|--------------|----------------|
| 规格           | 货号 (P/N)       |
| 150x 10 mm   | XPtPFP-1510070 |
| 250x 10 mm   | XPtPFP-2510070 |
| 150x 20 mm   | XPtPFP-1520070 |
| 250x 20 mm   | XPtPFP-2520070 |
| 150x 21.2 mm | XPtPFP-1521270 |
| 250x 21.2 mm | XPtPFP-2521270 |
| 150x 30 mm   | XPtPFP-1530070 |
| 250x 30 mm   | XPtPFP-2530070 |
| 150x 50 mm   | XPtPFP-1550070 |
| 250x 50 mm   | XPtPFP-2550070 |

| 可选粒径:10μm    |                 |
|--------------|-----------------|
| 规格           | 货号 (P/N)        |
| 150x 10 mm   | XPtPFP-15100100 |
| 250x 10 mm   | XPtPFP-25100100 |
| 150x 20 mm   | XPtPFP-15200100 |
| 250x 20 mm   | XPtPFP-25200100 |
| 150x 21.2 mm | XPtPFP-15212100 |
| 250x 21.2 mm | XPtPFP-25212100 |
| 150x 30 mm   | XPtPFP-15300100 |
| 250x 30 mm   | XPtPFP-25300100 |
| 150x 50 mm   | XPtPFP-15500100 |
| 250x 50 mm   | XPtPFP-25500100 |

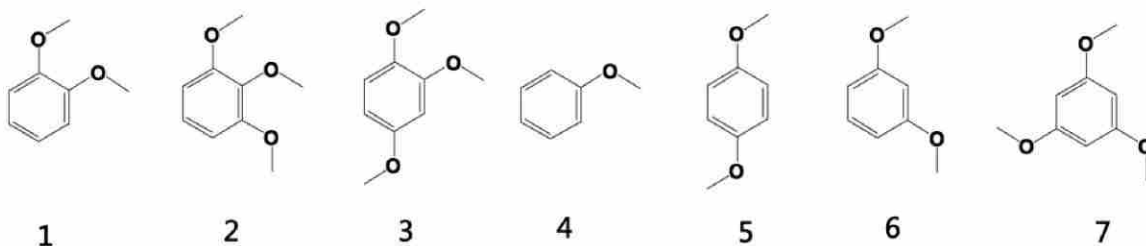
## MicroPulite® XP tC18/PFP 色谱柱

tC18/PFP是C18和PFP的混合键合模式,既具有C18的疏水作用,同时也具有PFP的 $\pi$ - $\pi$ 相互作用、偶极-偶极、氢键的选择性,多重作用模式使其与tC18、PFP有不一样的选择性。全结构杂化硅胶基质,独特的三键键合技术,在pH 1-12的范围内稳定,使得tC18/PFP具有优秀的化学稳定性和柱寿命。

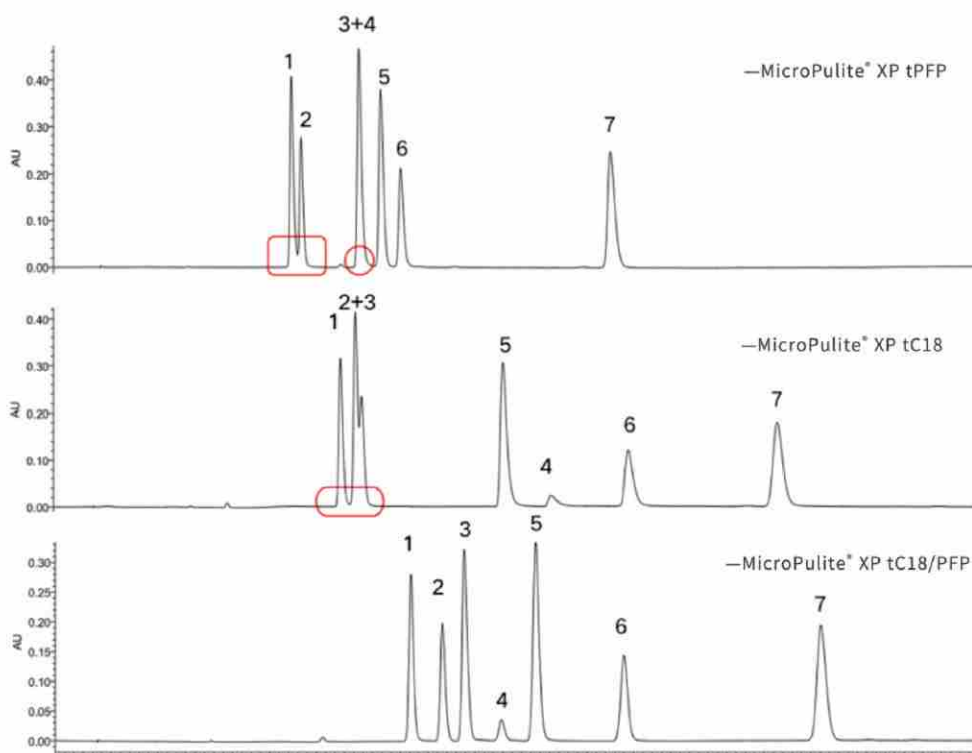
| 固定相         | 键合相                                                                               | 碳载量   | 比表面积 | 封端 | 孔径   | 可选粒径                      | USP分类 | pH范围 | 温度上限                            |
|-------------|-----------------------------------------------------------------------------------|-------|------|----|------|---------------------------|-------|------|---------------------------------|
| XP tC18/PFP |  | 14.5% | 185  | No | 130Å | 1.7,2.5,3<br>3.5,5,7,10µm | L1    | 1-12 | 45°C (Low pH)<br>45°C (High pH) |

### ◆应用案例

#### 取代的甲氧基苯异构体的分离



流动相:水:甲醇=65:35  
波长:230nm  
柱温:30°C



## MicorPulite® XP tC18/PFP 订购信息

| 可选粒径:1.7μm  |                |
|-------------|----------------|
| 规格          | 货号 (P/N)       |
| 30x 2.1 mm  | XPtFP18-032117 |
| 50x 2.1 mm  | XPtFP18-052117 |
| 100x 2.1 mm | XPtFP18-102117 |
| 150x 2.1 mm | XPtFP18-152117 |
| 30x 3.0 mm  | XPtFP18-033017 |
| 50x 3.0 mm  | XPtFP18-053017 |
| 100x 3.0 mm | XPtFP18-103017 |
| 150x 3.0 mm | XPtFP18-153017 |
|             |                |
|             |                |
|             |                |
|             |                |
|             |                |
|             |                |
|             |                |

| 可选粒径:2.5μm  |                |
|-------------|----------------|
| 规格          | 货号 (P/N)       |
| 30x 2.1 mm  | XPtFP18-032125 |
| 50x 2.1 mm  | XPtFP18-052125 |
| 100x 2.1 mm | XPtFP18-102125 |
| 150x 2.1 mm | XPtFP18-152125 |
| 30x 3.0 mm  | XPtFP18-033025 |
| 50x 3.0 mm  | XPtFP18-053025 |
| 100x 3.0 mm | XPtFP18-103025 |
| 150x 3.0 mm | XPtFP18-153025 |
| 250x 3.0 mm | XPtFP18-253025 |
| 30x 4.6 mm  | XPtFP18-034625 |
| 50x 4.6 mm  | XPtFP18-054625 |
| 100x 4.6 mm | XPtFP18-104625 |
| 150x 4.6 mm | XPtFP18-154625 |
| 200x 4.6 mm | XPtFP18-204625 |
| 250x 4.6 mm | XPtFP18-254625 |

| 可选粒径:3μm    |                |
|-------------|----------------|
| 规格          | 货号 (P/N)       |
| 30x 2.1 mm  | XPtFP18-032130 |
| 50x 2.1 mm  | XPtFP18-052130 |
| 100x 2.1 mm | XPtFP18-102130 |
| 150x 2.1 mm | XPtFP18-152130 |
| 30x 3.0 mm  | XPtFP18-033030 |
| 50x 3.0 mm  | XPtFP18-053030 |
| 100x 3.0 mm | XPtFP18-103030 |
| 150x 3.0 mm | XPtFP18-153030 |
| 250x 3.0 mm | XPtFP18-253030 |
| 30x 4.6 mm  | XPtFP18-034630 |
| 50x 4.6 mm  | XPtFP18-054630 |
| 100x 4.6 mm | XPtFP18-104630 |
| 150x 4.6 mm | XPtFP18-154630 |
| 200x 4.6 mm | XPtFP18-204630 |
| 250x 4.6 mm | XPtFP18-254630 |

| 可选粒径:3.5μm  |                |
|-------------|----------------|
| 规格          | 货号 (P/N)       |
| 30x 2.1 mm  | XPtFP18-032135 |
| 50x 2.1 mm  | XPtFP18-052135 |
| 100x 2.1 mm | XPtFP18-102135 |
| 150x 2.1 mm | XPtFP18-152135 |
| 30x 3.0 mm  | XPtFP18-033035 |
| 50x 3.0 mm  | XPtFP18-053035 |
| 100x 3.0 mm | XPtFP18-103035 |
| 150x 3.0 mm | XPtFP18-153035 |
| 250x 3.0 mm | XPtFP18-253035 |
| 30x 4.6 mm  | XPtFP18-034635 |
| 50x 4.6 mm  | XPtFP18-054635 |
| 100x 4.6 mm | XPtFP18-104635 |
| 150x 4.6 mm | XPtFP18-154635 |
| 200x 4.6 mm | XPtFP18-204635 |
| 250x 4.6 mm | XPtFP18-254635 |

| 可选粒径:5μm    |                |
|-------------|----------------|
| 规格          | 货号 (P/N)       |
| 30x 2.1 mm  | XPtFP18-032150 |
| 50x 2.1 mm  | XPtFP18-052150 |
| 100x 2.1 mm | XPtFP18-102150 |
| 150x 2.1 mm | XPtFP18-152150 |
| 30x 3.0 mm  | XPtFP18-033050 |
| 50x 3.0 mm  | XPtFP18-053050 |
| 100x 3.0 mm | XPtFP18-103050 |
| 150x 3.0 mm | XPtFP18-153050 |
| 250x 3.0 mm | XPtFP18-253050 |
| 30x 4.6 mm  | XPtFP18-034650 |
| 50x 4.6 mm  | XPtFP18-054650 |
| 100x 4.6 mm | XPtFP18-104650 |
| 150x 4.6 mm | XPtFP18-154650 |
| 200x 4.6 mm | XPtFP18-204650 |
| 250x 4.6 mm | XPtFP18-254650 |

| 可选粒径:5μm     |                 |
|--------------|-----------------|
| 规格           | 货号 (P/N)        |
| 150x 10 mm   | XPtFP18-1510050 |
| 250x 10 mm   | XPtFP18-2510050 |
| 150x 20 mm   | XPtFP18-1520050 |
| 250x 20 mm   | XPtFP18-2520050 |
| 150x 21.2 mm | XPtFP18-1521250 |
| 250x 21.2 mm | XPtFP18-2521250 |
| 150x 30 mm   | XPtFP18-1530050 |
| 250x 30 mm   | XPtFP18-2530050 |
| 150x 50 mm   | XPtFP18-1550050 |
| 250x 50 mm   | XPtFP18-2550050 |

| 可选粒径:7μm     |                 |
|--------------|-----------------|
| 规格           | 货号 (P/N)        |
| 150x 10 mm   | XPtFP18-1510070 |
| 250x 10 mm   | XPtFP18-2510070 |
| 150x 20 mm   | XPtFP18-1520070 |
| 250x 20 mm   | XPtFP18-2520070 |
| 150x 21.2 mm | XPtFP18-1521270 |
| 250x 21.2 mm | XPtFP18-2521270 |
| 150x 30 mm   | XPtFP18-1530070 |
| 250x 30 mm   | XPtFP18-2530070 |
| 150x 50 mm   | XPtFP18-1550070 |
| 250x 50 mm   | XPtFP18-2550070 |

| 可选粒径:10μm    |                  |
|--------------|------------------|
| 规格           | 货号 (P/N)         |
| 150x 10 mm   | XPtFP18-15100100 |
| 250x 10 mm   | XPtFP18-25100100 |
| 150x 20 mm   | XPtFP18-15200100 |
| 250x 20 mm   | XPtFP18-25200100 |
| 150x 21.2 mm | XPtFP18-15212100 |
| 250x 21.2 mm | XPtFP18-25212100 |
| 150x 30 mm   | XPtFP18-15300100 |
| 250x 30 mm   | XPtFP18-25300100 |
| 150x 50 mm   | XPtFP18-15500100 |
| 250x 50 mm   | XPtFP18-25500100 |

## MicroPulite® XP tC18-AX

XP tC18-AX是反相-阴离子交换混合模式的杂化硅胶色谱柱,在pH2-10的范围内稳定,兼容100%水相。XP tC18-AX带正电荷基团的设计使其能与带负电荷化合物发生离子交换作用力,从而增强极性酸性化合物的保留,并提供与C18色谱柱不同的选择性。而在酸性条件下分析碱性化合物时,因同种电荷间产生相互排斥作用力,碱性化合物的保留有所减弱,同时拖尾因子变小,从而改善这类碱性化合物的峰形。

| 固定相     | 键合相                                                                               | 碳载量 | 比表面积 | 封端  | 孔径   | 可选粒径                         | USP分类 | pH范围 | 温度上限                            |
|---------|-----------------------------------------------------------------------------------|-----|------|-----|------|------------------------------|-------|------|---------------------------------|
| tC18-AX |  | 17% | 185  | Yes | 130Å | 1.7, 2.5, 3, 3.5, 5, 7, 10µm | L78   | 2-10 | 60°C (Low pH)<br>60°C (High pH) |

### ◆应用案例

#### XP tC18-AX改善苯扎氯铵峰型拖尾

方法:自研

色谱柱:MicroPulite® XP tC18-AX 4.6\*250mm 5µm

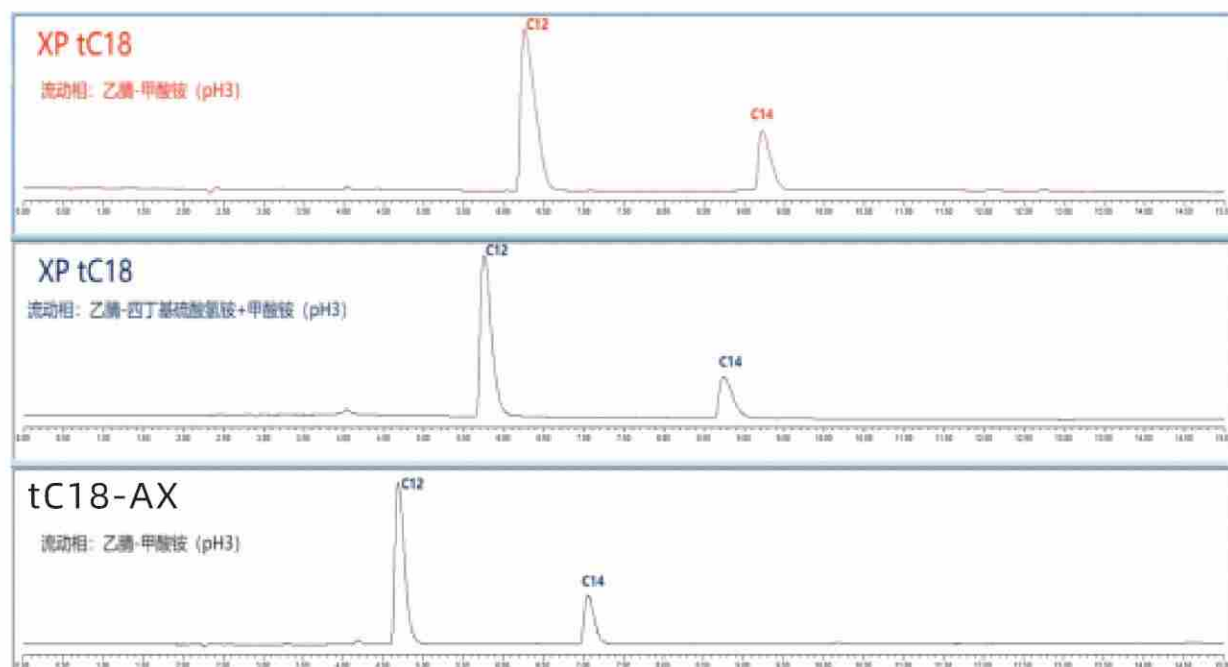
(货号:XPtC18AX-254650)

检测器:UV 262nm

流速:1mL/min

柱温:40°C

色谱图:



## MicroPulite® XPtC18-AX 订购信息

| 可选粒径: 1.7 μm |                 |
|--------------|-----------------|
| 规格           | 货号 (P/N)        |
| 50x 2.1 mm   | XPtC18AX-052117 |
| 100x 2.1 mm  | XPtC18AX-102117 |
| 150 x 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 |
|              |                 |
|              |                 |
|              |                 |
|              |                 |
|              |                 |
|              |                 |
|              |                 |
|              |                 |

| 可选粒径: 3.5 μm |                 |
|--------------|-----------------|
| 规格           | 货号 (P/N)        |
| 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 |

| 可选粒径: 5 μm    |                  |
|---------------|------------------|
| 规格            | 货号 (P/N)         |
| 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 |

| 可选粒径: 2.5 μm |                 |
|--------------|-----------------|
| 规格           | 货号 (P/N)        |
| 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 |

| 可选粒径: 5 μm   |                 |
|--------------|-----------------|
| 规格           | 货号 (P/N)        |
| 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 |

| 可选粒径: 7 μm    |                  |
|---------------|------------------|
| 规格            | 货号 (P/N)         |
| 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 |

| 可选粒径: 3 μm   |                 |
|--------------|-----------------|
| 规格           | 货号 (P/N)        |
| 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 |

| 可选粒径: 10 μm   |                   |
|---------------|-------------------|
| 规格            | 货号 (P/N)          |
| 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系列

PHS XP 系列色谱柱采用表面带电荷的杂化硅胶技术,为碱性化合物提供对称、卓越的峰形。表面微量正电荷在低离子强度的分离体系中与被电离的碱性化合物相互排斥,抑制了碱性化合物和残留硅醇基的离子交换作用,达到改善碱性化合物峰形的目的。该系列色谱柱提供从UPLC/UHPLC、HPLC到制备色谱的规格,从而使方法开发、方法转移更高效更有连续性。

- 在中酸性体系下,碱性分析物可以有优异的峰形和载样量
- pH 1-11, 宽pH条件便于方法开发筛选
- LCMS分析时,pH切换平衡迅速
- 尤其适合LCMS分析碱性分析物与肽,如结构鉴定、DMPK、兽药残留等

| 固定相                 | 键合相                                                                                 | 碳载量 | 孔径   | 可选粒径                   | USP分类 | pH范围 | 温度上限                            |
|---------------------|-------------------------------------------------------------------------------------|-----|------|------------------------|-------|------|---------------------------------|
| PHS XP tC18         |   | 17% | 130Å | 1.7,2.5,3,3.5,5,7,10µm | L1    | 1-11 | 80°C (Low pH)<br>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)<br>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)<br>45°C (High pH) |

## MicroPulite® PHS XP tC18 色谱柱

PHS XP tC18是通用型C18,因表面带有低水平的正电荷,在不使用离子对试剂的低离子强度流动相条件下(如0.1%甲酸体系),改善了碱性化合物的拖尾因子,从而使碱性化合物有卓越的峰形,同时也提高了样品的载样和峰容量。PHS XP tC18在pH1-11范围内稳定,适用于碱性化合物的分析,尤其是对肽的载量和峰形表现尤为突出。

| 固定相         | 键合相                                                                               | 碳载量 | 比表面积 | 封端  | 孔径   | 可选粒径                | USP分类 | pH范围 | 温度上限                            |
|-------------|-----------------------------------------------------------------------------------|-----|------|-----|------|---------------------|-------|------|---------------------------------|
| PHS XP tC18 |  | 17% | 185  | Yes | 130Å | 1.7,2.5,3,3.5,5,7µm | L1    | 1-11 | 80°C (Low pH)<br>45°C (High pH) |

### ◆应用案例

#### 加巴喷丁有关物质测定

方法:《中国药典》2020版

色谱柱:MicroPulite® PHS XP tC18 4.6\*150mm 5.0µm(货号:XPtC18P-154650)

检测器:UV 210nm

流速:1.5mL/min

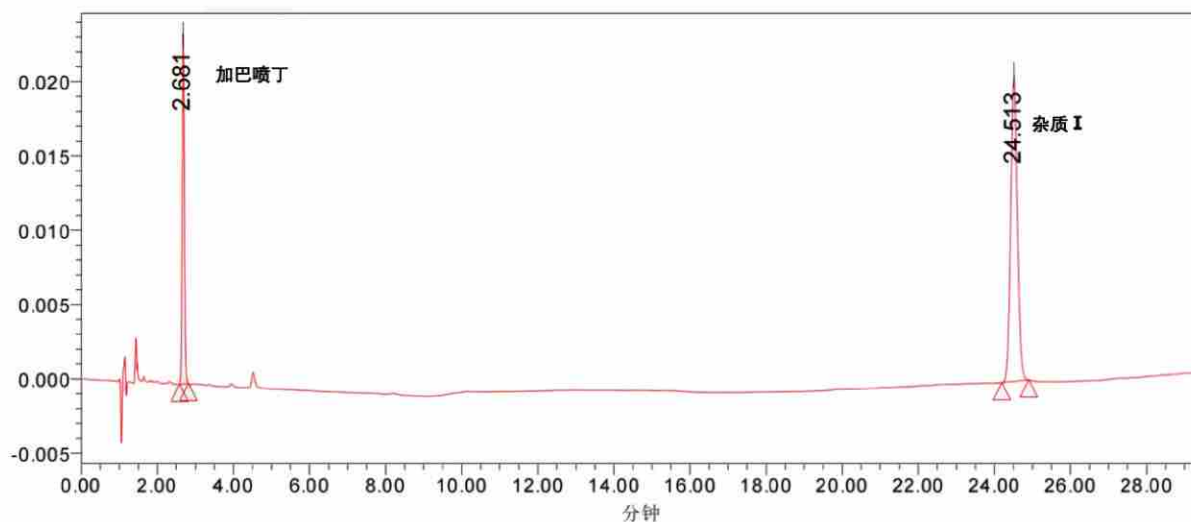
柱温:40°C

流动相:A相:磷酸盐缓冲液(取磷酸二氢钾 1.2g,加水 940mL 溶解,氢氧化钾调节 pH 值至 6.9)-乙腈=(94:6)

B相:磷酸盐缓冲液(取磷酸二氢钾1.2g,加水940ml溶解,氢氧化钾调节pH值至6.9)-乙腈=(7:3)

| 时间(分钟) | A%  | B%  |
|--------|-----|-----|
| 0      | 100 | 0   |
| 7      | 100 | 0   |
| 45     | 0   | 100 |

色谱图:





## MicroPulite® PHS XP tC18 订购信息

| 可选粒径: 1.7 μm |                |
|--------------|----------------|
| 规格           | 货号 (P/N)       |
| 50x 2.1 mm   | XPtC18P-052117 |
| 100x 2.1 mm  | XPtC18P-102117 |
| 150x 2.1 mm  | XPtC18P-152117 |
| 30x 3.0 mm   | XPtC18P-033017 |
| 50x 3.0 mm   | XPtC18P-053017 |
| 100x 3.0 mm  | XPtC18P-103017 |
| 150x 3.0 mm  | XPtC18P-153017 |
|              |                |
|              |                |
|              |                |
|              |                |
|              |                |
|              |                |
|              |                |
|              |                |

| 可选粒径: 2.5 μm |                |
|--------------|----------------|
| 规格           | 货号 (P/N)       |
| 30x 2.1 mm   | XPtC18P-032125 |
| 50x 2.1 mm   | XPtC18P-052125 |
| 100x 2.1 mm  | XPtC18P-102125 |
| 150x 2.1 mm  | XPtC18P-152125 |
| 30x 3.0 mm   | XPtC18P-033025 |
| 50x 3.0 mm   | XPtC18P-053025 |
| 100x 3.0 mm  | XPtC18P-103025 |
| 150x 3.0 mm  | XPtC18P-153025 |
| 250x 3.0 mm  | XPtC18P-253025 |
| 30x 4.6 mm   | XPtC18P-034625 |
| 50x 4.6 mm   | XPtC18P-054625 |
| 100x 4.6 mm  | XPtC18P-104625 |
| 150x 4.6 mm  | XPtC18P-154625 |
| 200x 4.6 mm  | XPtC18P-204625 |
| 250x 4.6 mm  | XPtC18P-254625 |

| 可选粒径: 3 μm  |                |
|-------------|----------------|
| 规格          | 货号 (P/N)       |
| 30x 2.1 mm  | XPtC18P-032130 |
| 50x 2.1 mm  | XPtC18P-052130 |
| 100x 2.1 mm | XPtC18P-102130 |
| 150x 2.1 mm | XPtC18P-152130 |
| 30x 3.0 mm  | XPtC18P-033030 |
| 50x 3.0 mm  | XPtC18P-053030 |
| 100x 3.0 mm | XPtC18P-103030 |
| 150x 3.0 mm | XPtC18P-153030 |
| 250x 3.0 mm | XPtC18P-253030 |
| 30x 4.6 mm  | XPtC18P-034630 |
| 50x 4.6 mm  | XPtC18P-054630 |
| 100x 4.6 mm | XPtC18P-104630 |
| 150x 4.6 mm | XPtC18P-154630 |
| 200x 4.6 mm | XPtC18P-204630 |
| 250x 4.6 mm | XPtC18P-254630 |

| 可选粒径: 3.5 μm |                |
|--------------|----------------|
| 规格           | 货号 (P/N)       |
| 30x 2.1 mm   | XPtC18P-032135 |
| 50x 2.1 mm   | XPtC18P-052135 |
| 100x 2.1 mm  | XPtC18P-102135 |
| 150x 2.1 mm  | XPtC18P-152135 |
| 30x 3.0 mm   | XPtC18P-033035 |
| 50x 3.0 mm   | XPtC18P-053035 |
| 100x 3.0 mm  | XPtC18P-103035 |
| 150x 3.0 mm  | XPtC18P-153035 |
| 250x 3.0 mm  | XPtC18P-253035 |
| 30x 4.6 mm   | XPtC18P-034635 |
| 50x 4.6 mm   | XPtC18P-054635 |
| 100x 4.6 mm  | XPtC18P-104635 |
| 150x 4.6 mm  | XPtC18P-154635 |
| 200x 4.6 mm  | XPtC18P-204635 |
| 250x 4.6 mm  | XPtC18P-254635 |

| 可选粒径: 5 μm  |                |
|-------------|----------------|
| 规格          | 货号 (P/N)       |
| 30x 2.1 mm  | XPtC18P-032150 |
| 50x 2.1 mm  | XPtC18P-052150 |
| 100x 2.1 mm | XPtC18P-102150 |
| 150x 2.1 mm | XPtC18P-152150 |
| 30x 3.0 mm  | XPtC18P-033050 |
| 50x 3.0 mm  | XPtC18P-053050 |
| 100x 3.0 mm | XPtC18P-103050 |
| 150x 3.0 mm | XPtC18P-153050 |
| 250x 3.0 mm | XPtC18P-253050 |
| 30x 4.6 mm  | XPtC18P-034650 |
| 50x 4.6 mm  | XPtC18P-054650 |
| 100x 4.6 mm | XPtC18P-104650 |
| 150x 4.6 mm | XPtC18P-154650 |
| 200x 4.6 mm | XPtC18P-204650 |
| 250x 4.6 mm | XPtC18P-254650 |

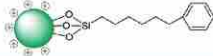
| 可选粒径: 5 μm   |                 |
|--------------|-----------------|
| 规格           | 货号 (P/N)        |
| 150x 10 mm   | XPtC18P-1510050 |
| 250x 10 mm   | XPtC18P-2510050 |
| 150x 20 mm   | XPtC18P-1520050 |
| 250x 20 mm   | XPtC18P-2520050 |
| 150x 21.2 mm | XPtC18P-1521250 |
| 250x 21.2 mm | XPtC18P-2521250 |
| 150x 30 mm   | XPtC18P-1530050 |
| 250x 30 mm   | XPtC18P-2530050 |
| 150x 50 mm   | XPtC18P-1550050 |
| 250x 50 mm   | XPtC18P-2550050 |

| 可选粒径: 7 μm   |                 |
|--------------|-----------------|
| 规格           | 货号 (P/N)        |
| 150x 10 mm   | XPtC18P-1510070 |
| 250x 10 mm   | XPtC18P-2510070 |
| 150x 20 mm   | XPtC18P-1520070 |
| 250x 20 mm   | XPtC18P-2520070 |
| 150x 21.2 mm | XPtC18P-1521270 |
| 250x 21.2 mm | XPtC18P-2521270 |
| 150x 30 mm   | XPtC18P-1530070 |
| 250x 30 mm   | XPtC18P-2530070 |
| 150x 50 mm   | XPtC18P-1550070 |
| 250x 50 mm   | XPtC18P-2550070 |

| 可选粒径: 10 μm  |                  |
|--------------|------------------|
| 规格           | 货号 (P/N)         |
| 150x 10 mm   | XPtC18P-15100100 |
| 250x 10 mm   | XPtC18P-25100100 |
| 150x 20 mm   | XPtC18P-15200100 |
| 250x 20 mm   | XPtC18P-25200100 |
| 150x 21.2 mm | XPtC18P-15212100 |
| 250x 21.2 mm | XPtC18P-25212100 |
| 150x 30 mm   | XPtC18P-15300100 |
| 250x 30 mm   | XPtC18P-25300100 |
| 150x 50 mm   | XPtC18P-15500100 |
| 250x 50 mm   | XPtC18P-25500100 |

## MicroPulite® PHS XP Phenyl-Hexyl 色谱柱

PHS XP Phenyl-Hexyl提供与直链C18互补的选择性, 杂化硅胶技术增强了化学耐受性, 在pH1-11的范围内使用, 表面带电改善了碱性化合物峰形与载量, 适用于芳香族化合物的分析。

| 固定相                 | 键合相                                                                               | 碳载量 | 比表面积 | 封端  | 孔径   | 可选粒径                       | USP分类 | pH范围 | 温度上限                            |
|---------------------|-----------------------------------------------------------------------------------|-----|------|-----|------|----------------------------|-------|------|---------------------------------|
| 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)<br>45°C (High pH) |

### MicroPulite® PHS XP Phenyl-Hexyl 订购信息

| 可选粒径: 1.7µm |              | 可选粒径: 2.5µm |              | 可选粒径: 3µm   |              |
|-------------|--------------|-------------|--------------|-------------|--------------|
| 规格          | 货号 (P/N)     | 规格          | 货号 (P/N)     | 规格          | 货号 (P/N)     |
| 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 |
| 150x 2.1 mm | PHSPH-152117 | 100x 2.1 mm | PHSPH-102125 | 100x 2.1 mm | PHSPH-102130 |
| 30x 3.0 mm  | PHSPH-033017 | 150x 2.1 mm | PHSPH-152125 | 150x 2.1 mm | PHSPH-152130 |
| 50x 3.0 mm  | PHSPH-053017 | 30x 3.0 mm  | PHSPH-033025 | 30x 3.0 mm  | PHSPH-033030 |
| 100x 3.0 mm | PHSPH-103017 | 50x 3.0 mm  | PHSPH-053025 | 50x 3.0 mm  | PHSPH-053030 |
| 150x 3.0 mm | PHSPH-153017 | 100x 3.0 mm | PHSPH-103025 | 100x 3.0 mm | PHSPH-103030 |
|             |              | 150x 3.0 mm | PHSPH-153025 | 150x 3.0 mm | PHSPH-153030 |
|             |              | 250x 3.0 mm | PHSPH-253025 | 250x 3.0 mm | PHSPH-253030 |
|             |              | 30x 4.6 mm  | PHSPH-034625 | 30x 4.6 mm  | PHSPH-034630 |
|             |              | 50x 4.6 mm  | PHSPH-054625 | 50x 4.6 mm  | PHSPH-054630 |
|             |              | 100x 4.6 mm | PHSPH-104625 | 100x 4.6 mm | PHSPH-104630 |
|             |              | 150x 4.6 mm | PHSPH-154625 | 150x 4.6 mm | PHSPH-154630 |
|             |              | 200x 4.6 mm | PHSPH-204625 | 200x 4.6 mm | PHSPH-204630 |
|             |              | 250x 4.6 mm | PHSPH-254625 | 250x 4.6 mm | PHSPH-254630 |

| 可选粒径: 3.5µm |              | 可选粒径: 5µm   |              |
|-------------|--------------|-------------|--------------|
| 规格          | 货号 (P/N)     | 规格          | 货号 (P/N)     |
| 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 |
| 150x 2.1 mm | PHSPH-152135 | 150x 2.1 mm | PHSPH-152150 |
| 30x 3.0 mm  | PHSPH-033035 | 30x 3.0 mm  | PHSPH-033050 |
| 50x 3.0 mm  | PHSPH-053035 | 50x 3.0 mm  | PHSPH-053050 |
| 100x 3.0 mm | PHSPH-103035 | 100x 3.0 mm | PHSPH-103050 |
| 150x 3.0 mm | PHSPH-153035 | 150x 3.0 mm | PHSPH-153050 |
| 250x 3.0 mm | PHSPH-253035 | 250x 3.0 mm | PHSPH-253050 |
| 30x 4.6 mm  | PHSPH-034635 | 30x 4.6 mm  | PHSPH-034650 |
| 50x 4.6 mm  | PHSPH-054635 | 50x 4.6 mm  | PHSPH-054650 |
| 100x 4.6 mm | PHSPH-104635 | 100x 4.6 mm | PHSPH-104650 |
| 150x 4.6 mm | PHSPH-154635 | 150x 4.6 mm | PHSPH-154650 |
| 200x 4.6 mm | PHSPH-204635 | 200x 4.6 mm | PHSPH-204650 |
| 250x 4.6 mm | PHSPH-254635 | 250x 4.6 mm | PHSPH-254650 |

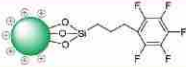
| 可选粒径:5μm      |               |
|---------------|---------------|
| 规格            | 货号 (P/N)      |
| 150 x 10 mm   | PHSPH-1510050 |
| 250 x 10 mm   | PHSPH-2510050 |
| 150 x 20 mm   | PHSPH-1520050 |
| 250 x 20 mm   | PHSPH-2520050 |
| 150 x 21.2 mm | PHSPH-1521250 |
| 250 x 21.2 mm | PHSPH-2521250 |
| 150 x 30 mm   | PHSPH-1530050 |
| 250 x 30 mm   | PHSPH-2530050 |
| 150 x 50 mm   | PHSPH-1550050 |
| 250 x 50 mm   | PHSPH-2550050 |

| 可选粒径:7μm      |               |
|---------------|---------------|
| 规格            | 货号 (P/N)      |
| 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 |

| 可选粒径:10μm     |                |
|---------------|----------------|
| 规格            | 货号 (P/N)       |
| 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 色谱柱

PHS XP tF5是表面带电的五氟苯基色谱柱, 适用于芳香族化合物、卤代化合物、平面位置异构体等的分析。

| 固定相        | 键合相                                                                               | 碳载量 | 比表面积 | 封端 | 孔径   | 可选粒径                        | USP分类 | pH范围 | 温度上限                            |
|------------|-----------------------------------------------------------------------------------|-----|------|----|------|-----------------------------|-------|------|---------------------------------|
| PHS XP tF5 |  | 10% | 185  | No | 130Å | 1.7, 2.5, 3.5<br>5, 7, 10µm | L43   | 1-8  | 60°C (Low pH)<br>45°C (High pH) |

### ◆应用案例

#### 叔丁基苯酚位置异构体的分离

方法: 自研

色谱柱: MicroPulite® PHS XP tF5 3.5µm 150\*4.6mm (货号: PHStF5-154635)

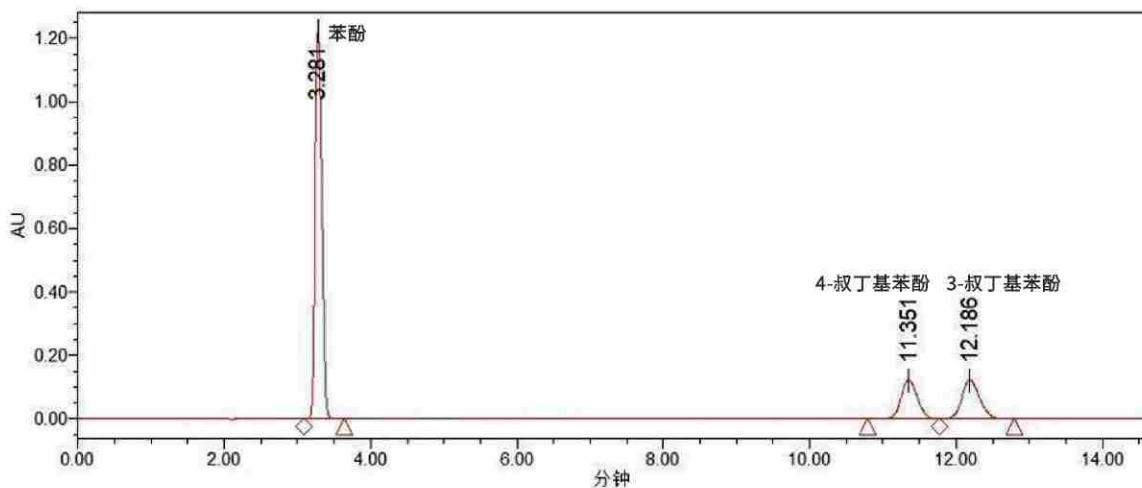
检测器: UV 270nm

流速: 1mL/min

柱温: 40°C

流动相: 甲醇:0.5%乙酸溶液 = (35:65)

色谱图:



**MicroP ulite® PHS XP tF5 订购信息**

| 可选粒径:1.7μm   |               | 可选粒径:2.5μm   |               | 可选粒径:3μm     |               |
|--------------|---------------|--------------|---------------|--------------|---------------|
| 规格           | 货号 (P/N)      | 规格           | 货号 (P/N)      | 规格           | 货号 (P/N)      |
| 50x 2.1 mm   | PHStF5-052117 | 30x 2.1 mm   | PHStF5-032125 | 30x 2.1 mm   | PHStF5-032130 |
| 100x 2.1 mm  | PHStF5-102117 | 50x 2.1 mm   | PHStF5-052125 | 50x 2.1 mm   | PHStF5-052130 |
| 150x 2.1 mm  | PHStF5-152117 | 100x 2.1 mm  | PHStF5-102125 | 100x 2.1 mm  | PHStF5-102130 |
| 30 x 3.0 mm  | PHStF5-033017 | 150 x 2.1 mm | PHStF5-152125 | 150 x 2.1 mm | PHStF5-152130 |
| 50 x 3.0 mm  | PHStF5-053017 | 30 x 3.0 mm  | PHStF5-033025 | 30 x 3.0 mm  | PHStF5-033030 |
| 100 x 3.0 mm | PHStF5-103017 | 50 x 3.0 mm  | PHStF5-053025 | 50 x 3.0 mm  | PHStF5-053030 |
| 150 x 3.0 mm | PHStF5-153017 | 100 x 3.0 mm | PHStF5-103025 | 100 x 3.0 mm | PHStF5-103030 |
|              |               | 150 x 3.0 mm | PHStF5-153025 | 150 x 3.0 mm | PHStF5-153030 |
|              |               | 250 x 3.0 mm | PHStF5-253025 | 250 x 3.0 mm | PHStF5-253030 |
|              |               | 30 x 4.6 mm  | PHStF5-034625 | 30 x 4.6 mm  | PHStF5-034630 |
|              |               | 50 x 4.6 mm  | PHStF5-054625 | 50 x 4.6 mm  | PHStF5-054630 |
|              |               | 100 x 4.6 mm | PHStF5-104625 | 100 x 4.6 mm | PHStF5-104630 |
|              |               | 150 x 4.6 mm | PHStF5-154625 | 150 x 4.6 mm | PHStF5-154630 |
|              |               | 200 x 4.6 mm | PHStF5-204625 | 200 x 4.6 mm | PHStF5-204630 |
|              |               | 250 x 4.6 mm | PHStF5-254625 | 250 x 4.6 mm | PHStF5-254630 |

| 可选粒径:3.5μm   |               | 可选粒径:5μm     |               |
|--------------|---------------|--------------|---------------|
| 规格           | 货号 (P/N)      | 规格           | 货号 (P/N)      |
| 30x 2.1 mm   | PHStF5-032135 | 30x 2.1 mm   | PHStF5-032150 |
| 50x 2.1 mm   | PHStF5-052135 | 50x 2.1 mm   | PHStF5-052150 |
| 100x 2.1 mm  | PHStF5-102135 | 100x 2.1 mm  | PHStF5-102150 |
| 150 x 2.1 mm | PHStF5-152135 | 150 x 2.1 mm | PHStF5-152150 |
| 30 x 3.0 mm  | PHStF5-033035 | 30 x 3.0 mm  | PHStF5-033050 |
| 50 x 3.0 mm  | PHStF5-053035 | 50 x 3.0 mm  | PHStF5-053050 |
| 100 x 3.0 mm | PHStF5-103035 | 100 x 3.0 mm | PHStF5-103050 |
| 150 x 3.0 mm | PHStF5-153035 | 150 x 3.0 mm | PHStF5-153050 |
| 250 x 3.0 mm | PHStF5-253035 | 250 x 3.0 mm | PHStF5-253050 |
| 30 x 4.6 mm  | PHStF5-034635 | 30 x 4.6 mm  | PHStF5-034650 |
| 50 x 4.6 mm  | PHStF5-054635 | 50 x 4.6 mm  | PHStF5-054650 |
| 100 x 4.6 mm | PHStF5-104635 | 100 x 4.6 mm | PHStF5-104650 |
| 150 x 4.6 mm | PHStF5-154635 | 150 x 4.6 mm | PHStF5-154650 |
| 200 x 4.6 mm | PHStF5-204635 | 200 x 4.6 mm | PHStF5-204650 |
| 250 x 4.6 mm | PHStF5-254635 | 250 x 4.6 mm | PHStF5-254650 |

| 可选粒径:5μm      |                | 可选粒径:7μm      |                | 可选粒径:10μm     |                 |
|---------------|----------------|---------------|----------------|---------------|-----------------|
| 规格            | 货号 (P/N)       | 规格            | 货号 (P/N)       | 规格            | 货号 (P/N)        |
| 150 x 10 mm   | PHStF5-1510050 | 150 x 10 mm   | PHStF5-1510070 | 150 x 10 mm   | PHStF5-15100100 |
| 250 x 10 mm   | PHStF5-2510050 | 250 x 10 mm   | PHStF5-2510070 | 250 x 10 mm   | PHStF5-25100100 |
| 150 x 20 mm   | PHStF5-1520050 | 150 x 20 mm   | PHStF5-1520070 | 150 x 20 mm   | PHStF5-15200100 |
| 250 x 20 mm   | PHStF5-2520050 | 250 x 20 mm   | PHStF5-2520070 | 250 x 20 mm   | PHStF5-25200100 |
| 150 x 21.2 mm | PHStF5-1521250 | 150 x 21.2 mm | PHStF5-1521270 | 150 x 21.2 mm | PHStF5-15212100 |
| 250 x 21.2 mm | PHStF5-2521250 | 250 x 21.2 mm | PHStF5-2521270 | 250 x 21.2 mm | PHStF5-25212100 |
| 150 x 30 mm   | PHStF5-1530050 | 150 x 30 mm   | PHStF5-1530070 | 150 x 30 mm   | PHStF5-15300100 |
| 250 x 30 mm   | PHStF5-2530050 | 250 x 30 mm   | PHStF5-2530070 | 250 x 30 mm   | PHStF5-25300100 |
| 150 x 50 mm   | PHStF5-1550050 | 150 x 50 mm   | PHStF5-1550070 | 150 x 50 mm   | PHStF5-15500100 |
| 250 x 50 mm   | PHStF5-2550050 | 250 x 50 mm   | PHStF5-2550070 | 250 x 50 mm   | PHStF5-25500100 |

## MicroPulite® Perfect色谱柱： 极性化合物的均衡保留方案

Perfect系列色谱柱适用于极性化合物的分析，在反相或者HILIC条件下保留和分离极性分析物，并使用微纯特有的封端技术，使化合物的峰形更优异。Diol可用于反相与亲水作用模式，也可作正相硅胶柱使用。HILIC适用于亲水作用模式分离极性化合物，也可以作为正相硅胶柱使用。T3在反相上加强了极性化合物的保留，从而多维度为极性化合物分析提供选择。

- 增强极性化合物保留能力的同时，维持对中等和强疏水化合物的适度保留能力。
- 同步国际最先进的键合和封端技术，LC-MS 兼容
- 耐受100%水相流动相
- 分离重现性好

| 固定相           | 键合相                                                                                 | 碳载量 | 孔径   | 可选粒径       | USP分类 | pH范围 | 温度上限                            |
|---------------|-------------------------------------------------------------------------------------|-----|------|------------|-------|------|---------------------------------|
| Perfect T3    |   | 14% | 120Å | 3, 5, 10µm | L1    | 1-8  | 45°C (Low pH)<br>45°C (High pH) |
| Perfect T3 SB |  | 14% | 120Å | 3, 5, 10µm | L1    | 1-8  | 45°C (Low pH)<br>45°C (High pH) |
| Perfect Diol  |  | 15% | 120Å | 3, 5, 10µm | L20   | 1-8  | 60°C (Low pH)<br>60°C (High pH) |
| Perfect HILIC |  | -   | 120Å | 3, 5, 10µm | L3    | 1-5  | 45°C (Low pH)<br>45°C (High pH) |

## MicroPulite® Perfect T3 色谱柱

Perfect T3 也是硅胶基质C18色谱柱,能兼容100%水相,特有的三键技术与封端技术增强了在纯水相体系的耐受性,在反相条件最大限度地提升极性化合物的保留。Perfect T3分析13种有机羧酸,这13种化合物在该款色谱柱的分析中都获得了理想的保留并呈现了优秀的峰形,是羧酸类极性分析物分析的首选。

| 固定相 | 键合相                                                                               | 碳载量 | 比表面积 | 封端  | 孔径   | 可选粒径     | USP分类 | pH范围 | 温度上限                            |
|-----|-----------------------------------------------------------------------------------|-----|------|-----|------|----------|-------|------|---------------------------------|
| T3  |  | 14% | 300  | Yes | 120Å | 3,5,10µm | L1    | 1-8  | 45°C (Low pH)<br>45°C (High pH) |

### ◆应用案例

#### 夏枯草配方颗粒的特征图谱与含量测定

方法:《中药配方颗粒国家药品标准(第一批)》

项目:特征图谱

色谱柱:MicroPulite® Perfect T3 4.6\*250mm 5.0µm (货号:PFTT3-254650)

检测器:UV 280nm

流速:1.0mL/min

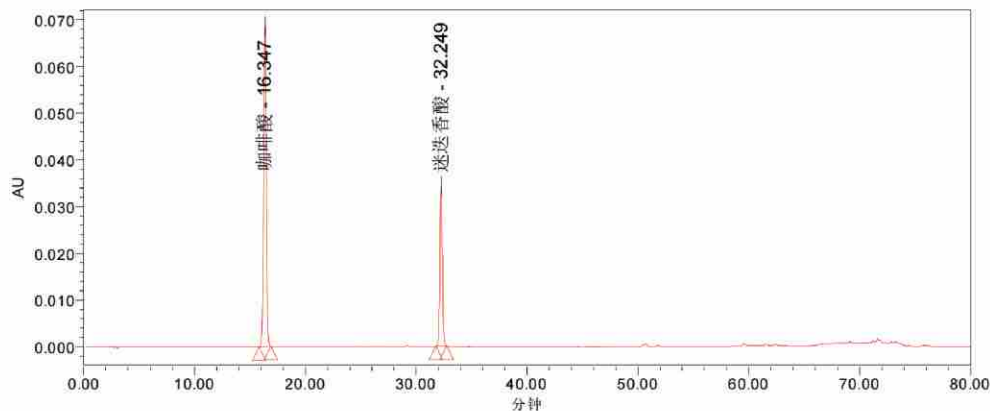
柱温:30°C

流动相:A相:乙腈;B相:0.1%磷酸溶液

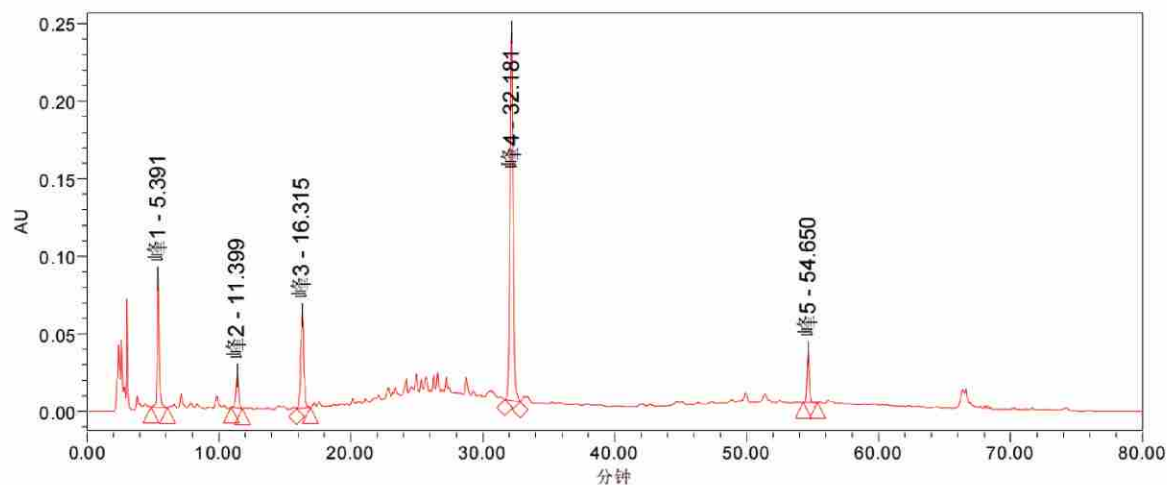
| 时间(分钟) | A% | B% |
|--------|----|----|
| 0      | 10 | 90 |
| 10     | 10 | 90 |
| 22     | 22 | 78 |
| 37     | 22 | 78 |
| 62     | 38 | 62 |
| 65     | 90 | 10 |

色谱图:

对照品溶液



## 供试品溶液



## 13种有机酸的分析

方法:自研

色谱柱:MicroPulite® Perfect T3 4.6\*250mm 5μm (货号:PFTT3-254650)

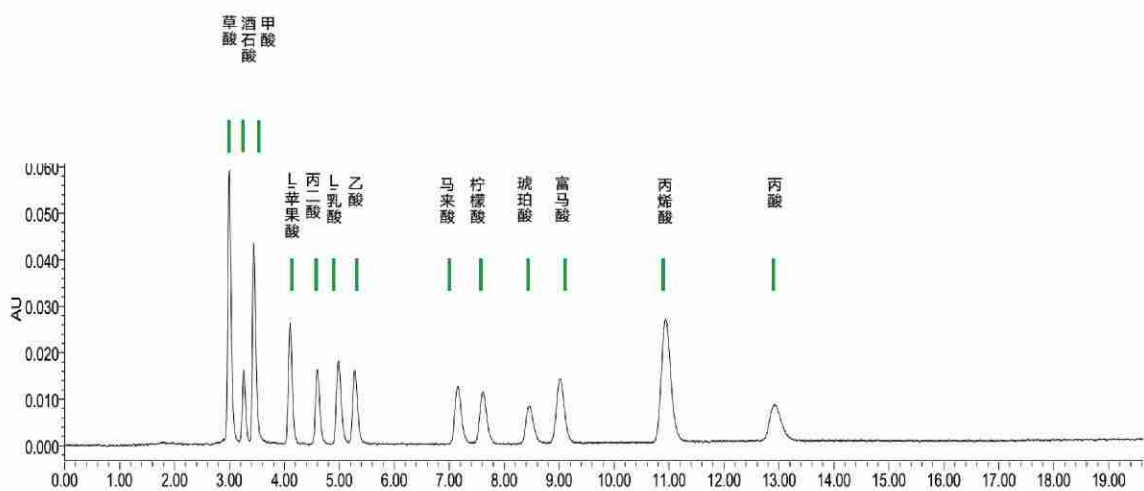
检测器:UV 220nm

流速:1mL/min

柱温:37°C

流动相:0.1%磷酸水溶液

色谱图:



## MicroPulite® Perfect T3 订购信息

| 可选粒径: 3 µm  |              |
|-------------|--------------|
| 规格          | 货号 (P/N)     |
| 30x 2.1 mm  | PFTT3-032130 |
| 50x 2.1 mm  | PFTT3-052130 |
| 100x 2.1 mm | PFTT3-102130 |
| 150x 2.1 mm | PFTT3-152130 |
| 30x 3.0 mm  | PFTT3-033030 |
| 50x 3.0 mm  | PFTT3-053030 |
| 100x 3.0 mm | PFTT3-103030 |
| 150x 3.0 mm | PFTT3-153030 |
| 250x 3.0 mm | PFTT3-253030 |
| 30x 4.6 mm  | PFTT3-034630 |
| 50x 4.6 mm  | PFTT3-054630 |
| 100x 4.6 mm | PFTT3-104630 |
| 150x 4.6 mm | PFTT3-154630 |
| 200x 4.6 mm | PFTT3-204630 |
| 250x 4.6 mm | PFTT3-254630 |

| 可选粒径: 5 µm  |              |
|-------------|--------------|
| 规格          | 货号 (P/N)     |
| 30x 2.1 mm  | PFTT3-032150 |
| 50x 2.1 mm  | PFTT3-052150 |
| 100x 2.1 mm | PFTT3-102150 |
| 150x 2.1 mm | PFTT3-152150 |
| 30x 3.0 mm  | PFTT3-033050 |
| 50x 3.0 mm  | PFTT3-053050 |
| 100x 3.0 mm | PFTT3-103050 |
| 150x 3.0 mm | PFTT3-153050 |
| 250x 3.0 mm | PFTT3-253050 |
| 30x 4.6 mm  | PFTT3-034650 |
| 50x 4.6 mm  | PFTT3-054650 |
| 100x 4.6 mm | PFTT3-104650 |
| 150x 4.6 mm | PFTT3-154650 |
| 200x 4.6 mm | PFTT3-204650 |
| 250x 4.6 mm | PFTT3-254650 |

| 可选粒径: 5 µm   |               |
|--------------|---------------|
| 规格           | 货号 (P/N)      |
| 150x 10 mm   | PFTT3-1510050 |
| 250x 10 mm   | PFTT3-2510050 |
| 150x 20 mm   | PFTT3-1520050 |
| 250x 20 mm   | PFTT3-2520050 |
| 150x 21.2 mm | PFTT3-1521250 |
| 250x 21.2 mm | PFTT3-2521250 |
| 150x 30 mm   | PFTT3-1530050 |
| 250x 30 mm   | PFTT3-2530050 |
| 150x 50 mm   | PFTT3-1550050 |
| 250x 50 mm   | PFTT3-2550050 |

| 可选粒径: 10 µm  |                |
|--------------|----------------|
| 规格           | 货号 (P/N)       |
| 150x 10 mm   | PFTT3-15100100 |
| 250x 10 mm   | PFTT3-25100100 |
| 150x 20 mm   | PFTT3-15200100 |
| 250x 20 mm   | PFTT3-25200100 |
| 150x 21.2 mm | PFTT3-15212100 |
| 250x 21.2 mm | PFTT3-25212100 |
| 150x 30 mm   | PFTT3-15300100 |
| 250x 30 mm   | PFTT3-25300100 |
| 150x 50 mm   | PFTT3-15500100 |
| 250x 50 mm   | PFTT3-25500100 |

## MicroPulite® Perfect T3 SB 色谱柱

Perfect T3 SB是未封端的C18柱,兼容并耐受100%水,因表面存在较多的游离硅醇基,具有独特的选择性,能增强极性化合物(特别是碱性化合物)的保留。在酸性流动相条件下使用时,未封端能避免封端试剂在酸性条件下水解,故在Perfect T3 SB低pH条件下使用柱寿命长,重现性良好。

| 固定相   | 键合相                                                                               | 碳载量 | 比表面积 | 封端 | 孔径   | 可选粒径     | USP分类 | pH范围 | 温度上限                            |
|-------|-----------------------------------------------------------------------------------|-----|------|----|------|----------|-------|------|---------------------------------|
| T3 SB |  | 14% | 300  | No | 120Å | 3,5,10µm | L1    | 1-8  | 45°C (Low pH)<br>45°C (High pH) |

### MicroPulite® Perfect T3 SB 订购信息

| 可选粒径: 3 µm  |                | 可选粒径: 5 µm  |                |
|-------------|----------------|-------------|----------------|
| 规格          | 货号 (P/N)       | 规格          | 货号 (P/N)       |
| 30x 2.1 mm  | PFTT3SB-032130 | 30x 2.1 mm  | PFTT3SB-032150 |
| 50x 2.1 mm  | PFTT3SB-052130 | 50x 2.1 mm  | PFTT3SB-052150 |
| 100x 2.1 mm | PFTT3SB-102130 | 100x 2.1 mm | PFTT3SB-102150 |
| 150x 2.1 mm | PFTT3SB-152130 | 150x 2.1 mm | PFTT3SB-152150 |
| 30x 3.0 mm  | PFTT3SB-033030 | 30x 3.0 mm  | PFTT3SB-033050 |
| 50x 3.0 mm  | PFTT3SB-053030 | 50x 3.0 mm  | PFTT3SB-053050 |
| 100x 3.0 mm | PFTT3SB-103030 | 100x 3.0 mm | PFTT3SB-103050 |
| 150x 3.0 mm | PFTT3SB-153030 | 150x 3.0 mm | PFTT3SB-153050 |
| 250x 3.0 mm | PFTT3SB-253030 | 250x 3.0 mm | PFTT3SB-253050 |
| 30x 4.6 mm  | PFTT3SB-034630 | 30x 4.6 mm  | PFTT3SB-034650 |
| 50x 4.6 mm  | PFTT3SB-054630 | 50x 4.6 mm  | PFTT3SB-054650 |
| 100x 4.6 mm | PFTT3SB-104630 | 100x 4.6 mm | PFTT3SB-104650 |
| 150x 4.6 mm | PFTT3SB-154630 | 150x 4.6 mm | PFTT3SB-154650 |
| 200x 4.6 mm | PFTT3SB-204630 | 200x 4.6 mm | PFTT3SB-204650 |
| 250x 4.6 mm | PFTT3SB-254630 | 250x 4.6 mm | PFTT3SB-254650 |

| 可选粒径: 5 µm   |                 | 可选粒径: 10 µm  |                  |
|--------------|-----------------|--------------|------------------|
| 规格           | 货号 (P/N)        | 规格           | 货号 (P/N)         |
| 150x 10 mm   | PFTT3SB-1510050 | 150x 10 mm   | PFTT3SB-15100100 |
| 250x 10 mm   | PFTT3SB-2510050 | 250x 10 mm   | PFTT3SB-25100100 |
| 150x 20 mm   | PFTT3SB-1520050 | 150x 20 mm   | PFTT3SB-15200100 |
| 250x 20 mm   | PFTT3SB-2520050 | 250x 20 mm   | PFTT3SB-25200100 |
| 150x 21.2 mm | PFTT3SB-1521250 | 150x 21.2 mm | PFTT3SB-15212100 |
| 250x 21.2 mm | PFTT3SB-2521250 | 250x 21.2 mm | PFTT3SB-25212100 |
| 150x 30 mm   | PFTT3SB-1530050 | 150x 30 mm   | PFTT3SB-15300100 |
| 250x 30 mm   | PFTT3SB-2530050 | 250x 30 mm   | PFTT3SB-25300100 |
| 150x 50 mm   | PFTT3SB-1550050 | 150x 50 mm   | PFTT3SB-15500100 |
| 250x 50 mm   | PFTT3SB-2550050 | 250x 50 mm   | PFTT3SB-25500100 |

## MicroPulite® Perfect Diol 色谱柱

Perfect Diol是二羟基丙基硅烷键合硅胶色谱柱,可在正相和亲水作用模式下使用,正相保留能力与硅胶、氨基填料类似(二醇基极性比裸硅胶弱,比氨基柱极性强),适用于多肽、蛋白、极性化合物的分析。

| 固定相  | 键合相                                                                               | 碳载量 | 比表面积 | 封端  | 孔径   | 可选粒径     | USP分类 | pH范围 | 温度上限                            |
|------|-----------------------------------------------------------------------------------|-----|------|-----|------|----------|-------|------|---------------------------------|
| Diol |  | 15% | 300  | Yes | 120Å | 3,5,10µm | L20   | 1-8  | 60°C (Low pH)<br>60°C (High pH) |

### MicroPulite® Perfect Diol 订购信息

| 可选粒径: 3 µm   |             | 可选粒径: 5 µm   |             |
|--------------|-------------|--------------|-------------|
| 规格           | 货号 (P/N)    | 规格           | 货号 (P/N)    |
| 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 |
| 150 x 2.1 mm | PFTD-152130 | 150 x 2.1 mm | PFTD-152150 |
| 30 x 3.0 mm  | PFTD-033030 | 30 x 3.0 mm  | PFTD-033050 |
| 50 x 3.0 mm  | PFTD-053030 | 50 x 3.0 mm  | PFTD-053050 |
| 100 x 3.0 mm | PFTD-103030 | 100 x 3.0 mm | PFTD-103050 |
| 150 x 3.0 mm | PFTD-153030 | 150 x 3.0 mm | PFTD-153050 |
| 250 x 3.0 mm | PFTD-253030 | 250 x 3.0 mm | PFTD-253050 |
| 30 x 4.6 mm  | PFTD-034630 | 30 x 4.6 mm  | PFTD-034650 |
| 50 x 4.6 mm  | PFTD-054630 | 50 x 4.6 mm  | PFTD-054650 |
| 100 x 4.6 mm | PFTD-104630 | 100 x 4.6 mm | PFTD-104650 |
| 150 x 4.6 mm | PFTD-154630 | 150 x 4.6 mm | PFTD-154650 |
| 200 x 4.6 mm | PFTD-204630 | 200 x 4.6 mm | PFTD-204650 |
| 250 x 4.6 mm | PFTD-254630 | 250 x 4.6 mm | PFTD-254650 |

| 可选粒径: 5 µm    |              | 可选粒径: 10 µm   |               |
|---------------|--------------|---------------|---------------|
| 规格            | 货号 (P/N)     | 规格            | 货号 (P/N)      |
| 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 色谱柱

Perfect HILIC 可以是亲水作用色谱, 在反相流动相体系下保留与分离高极性化合物, 尤其适用于强极性碱性化合物; 也可以正相硅胶柱使用。

| 固定相   | 键合相                                                                               | 碳载量 | 比表面积 | 封端 | 孔径   | 可选粒径     | USP分类 | pH范围 | 温度上限                            |
|-------|-----------------------------------------------------------------------------------|-----|------|----|------|----------|-------|------|---------------------------------|
| HILIC |  | -   | 300  | No | 120Å | 3,5,10µm | L3    | 1-5  | 45°C (Low pH)<br>45°C (High pH) |

### MicroPulite® Perfect HILIC 订购信息

| 可选粒径: 3 µm  |             | 可选粒径: 5 µm  |             |
|-------------|-------------|-------------|-------------|
| 规格          | 货号 (P/N)    | 规格          | 货号 (P/N)    |
| 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 |
| 150x 2.1 mm | PFTH-152130 | 150x 2.1 mm | PFTH-152150 |
| 30x 3.0 mm  | PFTH-033030 | 30x 3.0 mm  | PFTH-033050 |
| 50x 3.0 mm  | PFTH-053030 | 50x 3.0 mm  | PFTH-053050 |
| 100x 3.0 mm | PFTH-103030 | 100x 3.0 mm | PFTH-103050 |
| 150x 3.0 mm | PFTH-153030 | 150x 3.0 mm | PFTH-153050 |
| 250x 3.0 mm | PFTH-253030 | 250x 3.0 mm | PFTH-253050 |
| 30x 4.6 mm  | PFTH-034630 | 30x 4.6 mm  | PFTH-034650 |
| 50x 4.6 mm  | PFTH-054630 | 50x 4.6 mm  | PFTH-054650 |
| 100x 4.6 mm | PFTH-104630 | 100x 4.6 mm | PFTH-104650 |
| 150x 4.6 mm | PFTH-154630 | 150x 4.6 mm | PFTH-154650 |
| 200x 4.6 mm | PFTH-204630 | 200x 4.6 mm | PFTH-204650 |
| 250x 4.6 mm | PFTH-254630 | 250x 4.6 mm | PFTH-254650 |

| 可选粒径: 5 µm   |              | 可选粒径: 10 µm  |               |
|--------------|--------------|--------------|---------------|
| 规格           | 货号 (P/N)     | 规格           | 货号 (P/N)      |
| 150x 10 mm   | PFTH-1510050 | 150x 10 mm   | PFTH-15100100 |
| 250x 10 mm   | PFTH-2510050 | 250x 10 mm   | PFTH-25100100 |
| 150x 20 mm   | PFTH-1520050 | 150x 20 mm   | PFTH-15200100 |
| 250x 20 mm   | PFTH-2520050 | 250x 20 mm   | PFTH-25200100 |
| 150x 21.2 mm | PFTH-1521250 | 150x 21.2 mm | PFTH-15212100 |
| 250x 21.2 mm | PFTH-2521250 | 250x 21.2 mm | PFTH-25212100 |
| 150x 30 mm   | PFTH-1530050 | 150x 30 mm   | PFTH-15300100 |
| 250x 30 mm   | PFTH-2530050 | 250x 30 mm   | PFTH-25300100 |
| 150x 50 mm   | PFTH-1550050 | 150x 50 mm   | PFTH-15500100 |
| 250x 50 mm   | PFTH-2550050 | 250x 50 mm   | PFTH-25500100 |

## MicroPulite® HSS T3色谱柱： 搭配更高强度硅胶的三键键合技术为方法开发而设计

选用微纯HSS高强度硅胶系列分析色谱填料和三键键合技术，可以耐受更高的压力范围。化合物性质适用性广，可兼容100%的水相，酸性条件耐受性好，柱流失极低，特有的封端技术，让峰形更优异。

- 更高的硅烷亲和性，提高极性化合物保留，减弱强疏水性保留
- 针对快速方法开发而设计，缩短方法开发的时间，节约成本
- 更高的机械强度，更宽泛的选择性

| 固定相 | 键合相                                                                               | 碳载量 | 比表面积 | 封端  | 孔径   | 可选粒径              | USP分类 | pH范围 | 温度上限                            |
|-----|-----------------------------------------------------------------------------------|-----|------|-----|------|-------------------|-------|------|---------------------------------|
| T3  |  | 11% | 230  | Yes | 100Å | 1.8, 2.5<br>3.5µm | L1    | 1-8  | 45°C (Low pH)<br>45°C (High pH) |

HSS T3 也是通用型C18柱，兼容并耐受100%水相，在反相条件下显著增强对极性化合物的保留，同时HSS T3低碳载量的设计也能减弱疏水性化合物保留，适用于中药与中药配方颗粒、代谢组学等领域的研究。

### ◆应用案例

#### 茯苓配方颗粒

方法：《贵州省中药配方颗粒质量标准（第四批）》

项目：特征图谱

色谱柱：MicroPulite® HSS T3 1.8µm 150\*2.1mm (货号：HST3-152118)

检测器：UV 252nm

流速：0.2mL/min

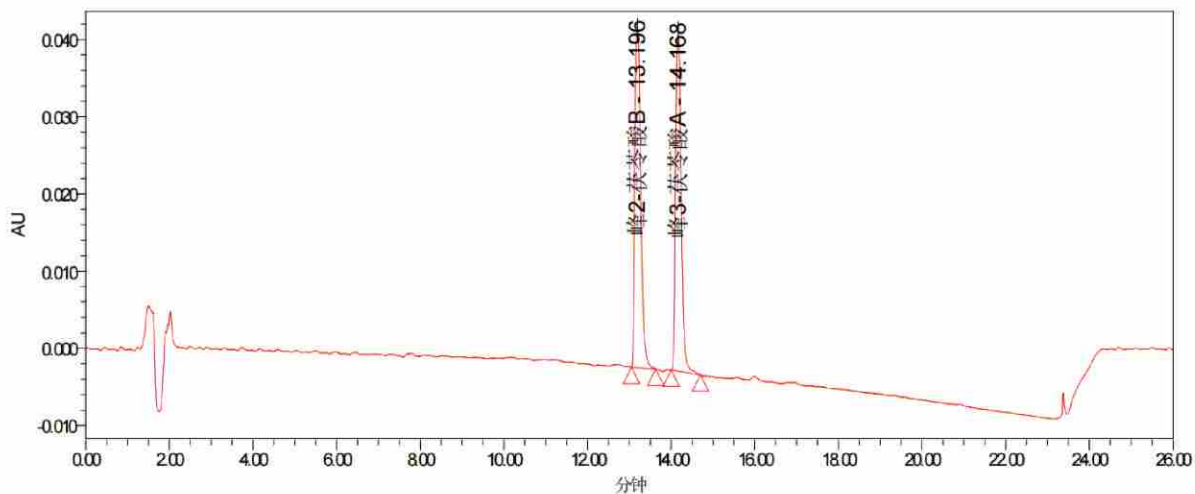
柱温：30°C

流动相：A相：乙腈；B相：0.1%甲酸溶液

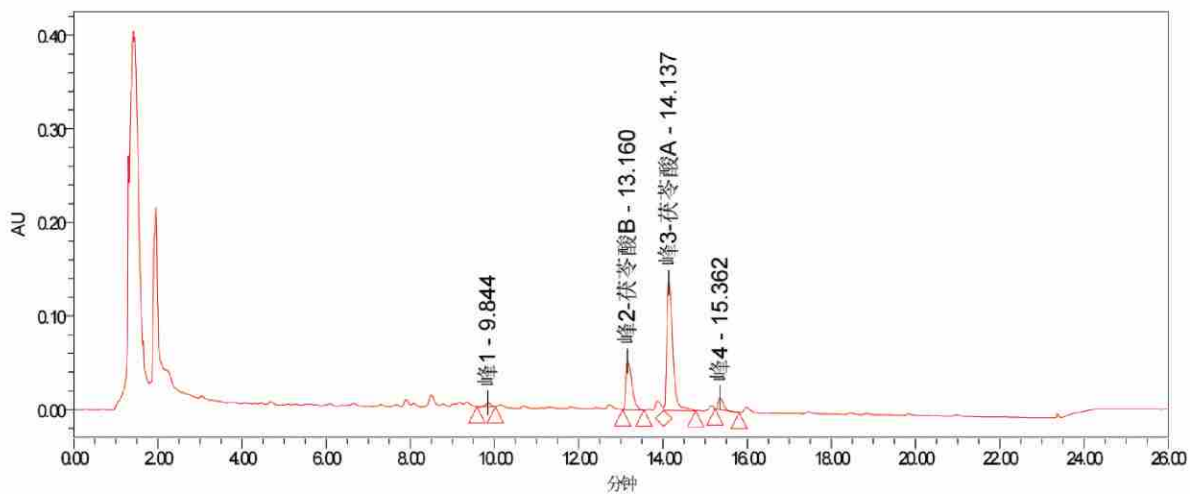
| 时间(分钟) | A% | B% |
|--------|----|----|
| 0      | 40 | 60 |
| 21     | 99 | 1  |
| 22     | 40 | 60 |

色谱图:

参照物溶液



供试品溶液



项目:含量测定

色谱柱:MicroPulite® HSS T3 1.8μm 150\*2.1mm (货号:HST3-152118)

检测器:UV 252nm

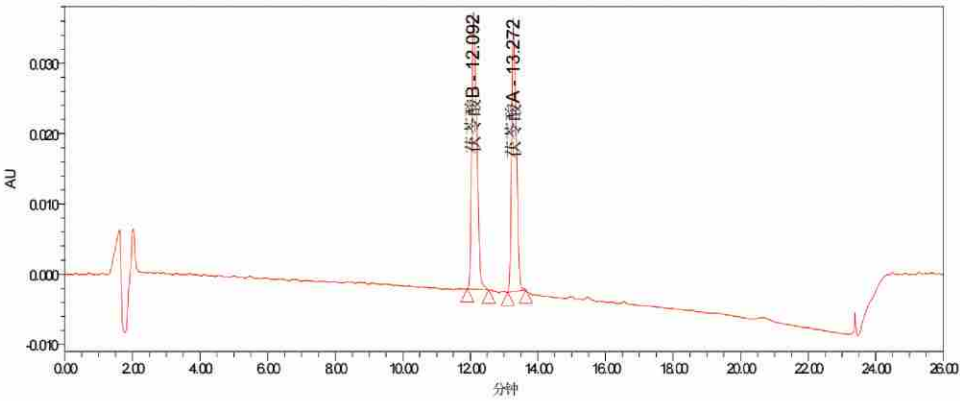
流速:0.2mL/min

柱温:30℃

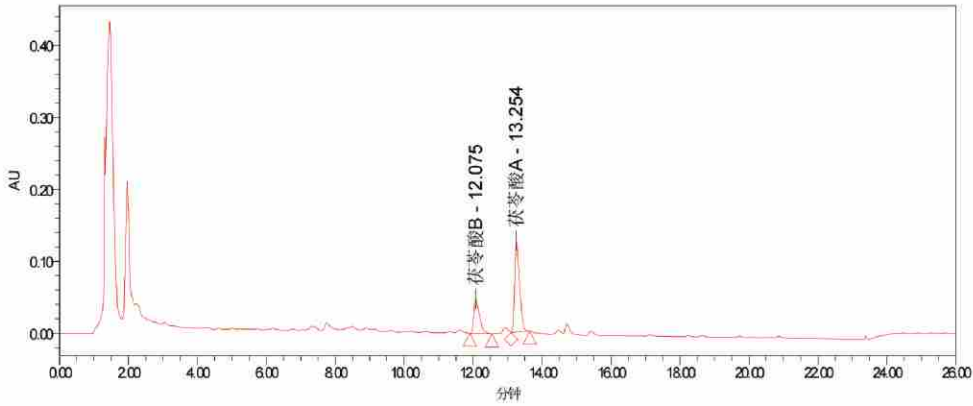
流动相:A相:乙腈;B相:0.1%甲酸溶液

| 时间(分钟) | A% | B% |
|--------|----|----|
| 0      | 40 | 60 |
| 21     | 99 | 1  |
| 22     | 40 | 60 |

色谱图：  
对照品溶液



供试品溶液

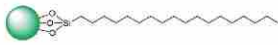
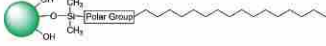
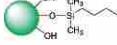
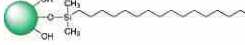


MicroPulite® HSS T3 订购信息

| 可选粒径: 1.8 μm |             | 可选粒径: 2.5 μm |             | 可选粒径: 3.5 μm |             |
|--------------|-------------|--------------|-------------|--------------|-------------|
| 规格           | 货号 (P/N)    | 规格           | 货号 (P/N)    | 规格           | 货号 (P/N)    |
| 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 |
| 30x 3.0 mm   | HST3-033018 | 150x 2.1 mm  | HST3-152125 | 150x 2.1 mm  | HST3-152135 |
| 50x 3.0 mm   | HST3-053018 | 30x 3.0 mm   | HST3-033025 | 30x 3.0 mm   | HST3-033035 |
| 100x 3.0 mm  | HST3-103018 | 50x 3.0 mm   | HST3-053025 | 50x 3.0 mm   | HST3-053035 |
| 150x 3.0 mm  | HST3-153018 | 100x 3.0 mm  | HST3-103025 | 100x 3.0 mm  | HST3-103035 |
|              |             | 150x 3.0 mm  | HST3-153025 | 150x 3.0 mm  | HST3-153035 |
|              |             | 250x 3.0 mm  | HST3-253025 | 250x 3.0 mm  | HST3-353035 |
|              |             | 30x 4.6 mm   | HST3-034625 | 30x 4.6 mm   | HST3-034635 |
|              |             | 50x 4.6 mm   | HST3-054625 | 50x 4.6 mm   | HST3-054635 |
|              |             | 100x 4.6 mm  | HST3-104625 | 100x 4.6 mm  | HST3-104635 |
|              |             | 150x 4.6 mm  | HST3-154625 | 150x 4.6 mm  | HST3-154635 |
|              |             | 200x 4.6 mm  | HST3-204625 | 200x 4.6 mm  | HST3-204635 |
|              |             | 250x 4.6 mm  | HST3-254625 | 250x 4.6 mm  | HST3-354635 |

## BioPulite®系列-生物分离液相色谱柱

BioPulite®系列产品基于微纯生物科技自主知识产权的微球生产工艺,从硅源开始合成多孔微球,精准控制微球粒径,柱效高,机械强度高,性能稳定。依托于国际领先的微球表面键合修饰技术平台为不同生物分子提供相适合的选择性。在ISO 9001严格质控下,确保产品的性能和重现性。该系列色谱柱适用于不同生物分子,包括单克隆抗体(mAbs) 和蛋白质等大分子分析,是生物制药、生物技术和生命科学研究领域有效的工具。

| 固定相                  | 键合相                                                                                 | 碳载量  | 孔径             | 可选粒径               | USP分类 | pH范围 | 温度上限                            |
|----------------------|-------------------------------------------------------------------------------------|------|----------------|--------------------|-------|------|---------------------------------|
| XP Protein tC18      |    | 12%  | 300Å           | 1.7,2.5<br>3.5,5µm | L1    | 1-12 | 80°C (Low pH)<br>60°C (High pH) |
| XP Protein tC4       |    | 8%   | 300Å           | 1.7,2.5<br>3.5,5µm | L26   | 1-12 | 80°C (Low pH)<br>50°C (High pH) |
| XP Protein RP18      |    | 12%  | 300Å           | 3.5,5µm            | L1    | 2-11 | 50°C (Low pH)<br>45°C (High pH) |
| XP Protein RP18 Plus |   | 17%  | 300Å           | 3.5,5µm            | L1    | 2-11 | 50°C (Low pH)<br>45°C (High pH) |
| Gold Protein C4      |  | 1.3% | 300Å           | 3,5µm              | L26   | 2-8  | 60°C (Low pH)<br>40°C (High pH) |
| Gold Protein C18     |  | 8.5% | 300Å           | 3,5µm              | L1    | 2-8  | 60°C (Low pH)<br>40°C (High pH) |
| Protein Perfect SEC  |  |      | 125 Å<br>300 Å | 5µm                | L33   | 2-8  | 45°C (Low pH)<br>45°C (High pH) |

## BioPulite® XP Protein tC18 色谱柱

Protein tC18是300Å孔径的杂化硅胶色谱柱,在pH1-12的范围内稳定,对高温、高pH、高浓度缓冲盐等严苛条件有更优异的耐受性,适用于反相条件下分离大分子化合物,如肽、蛋白质、寡核苷酸药物、mRNA等的分析。

| 固定相             | 键合相                                                                               | 碳载量 | 比表面积 | 封端  | 孔径   | 可选粒径               | USP分类 | pH范围 | 温度上限                            |
|-----------------|-----------------------------------------------------------------------------------|-----|------|-----|------|--------------------|-------|------|---------------------------------|
| XP Protein tC18 |  | 12% | 100  | Yes | 300Å | 1.7,2.5<br>3.5,5µm | L1    | 1-12 | 80°C (Low pH)<br>60°C (High pH) |

### BioPulite® XP Protein tC18 订购信息

| 可选粒径: 1.7µm |                    | 可选粒径: 2.5µm |                    | 可选粒径: 3.5 µm |                   |
|-------------|--------------------|-------------|--------------------|--------------|-------------------|
| 规格          | 货号 (P/N)           | 规格          | 货号 (P/N)           | 规格           | 货号 (P/N)          |
| 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 |
| 150x 2.1 mm | XPtC18-300--152117 | 100x 2.1 mm | XPtC18-300--102125 | 100x 2.1 mm  | XPtC18-300-102135 |
| 30x 3.0 mm  | XPtC18-300--033017 | 150x 2.1 mm | XPtC18-300--152125 | 150x 2.1 mm  | XPtC18-300-152135 |
| 50x 3.0 mm  | XPtC18-300--053017 | 30x 3.0 mm  | XPtC18-300--033025 | 30x 3.0 mm   | XPtC18-300-033035 |
| 100x 3.0 mm | XPtC18-300--103017 | 50x 3.0 mm  | XPtC18-300--053025 | 50x 3.0 mm   | XPtC18-300-053035 |
| 150x 3.0 mm | XPtC18-300--153017 | 100x 3.0 mm | XPtC18-300--103025 | 100x 3.0 mm  | XPtC18-300-103035 |
|             |                    | 150x 3.0 mm | XPtC18-300--153025 | 150x 3.0 mm  | XPtC18-300-153035 |
|             |                    | 250x 3.0 mm | XPtC18-300--253025 | 250x 3.0 mm  | XPtC18-300-253035 |
|             |                    | 30x 4.6 mm  | XPtC18-300--034625 | 30x 4.6 mm   | XPtC18-300-034635 |
|             |                    | 50x 4.6 mm  | XPtC18-300--054625 | 50x 4.6 mm   | XPtC18-300-054635 |
|             |                    | 100x 4.6 mm | XPtC18-300--104625 | 100x 4.6 mm  | XPtC18-300-104635 |
|             |                    | 150x 4.6 mm | XPtC18-300--154625 | 150x 4.6 mm  | XPtC18-300-154635 |
|             |                    | 200x 4.6 mm | XPtC18-300--204625 | 200x 4.6 mm  | XPtC18-300-204635 |
|             |                    | 250x 4.6 mm | XPtC18-300--254625 | 250x 4.6 mm  | XPtC18-300-254635 |

| 可选粒径: 5 µm  |                   |
|-------------|-------------------|
| 规格          | 货号 (P/N)          |
| 30x 2.1 mm  | XPtC18-300-032150 |
| 50x 2.1 mm  | XPtC18-300-052150 |
| 100x 2.1 mm | XPtC18-300-102150 |
| 150x 2.1 mm | XPtC18-300-152150 |
| 30x 3.0 mm  | XPtC18-300-033050 |
| 50x 3.0 mm  | XPtC18-300-053050 |
| 100x 3.0 mm | XPtC18-300-103050 |
| 150x 3.0 mm | XPtC18-300-153050 |
| 250x 3.0 mm | XPtC18-300-253050 |
| 30x 4.6 mm  | XPtC18-300-034650 |
| 50x 4.6 mm  | XPtC18-300-054650 |
| 100x 4.6 mm | XPtC18-300-104650 |
| 150x 4.6 mm | XPtC18-300-154650 |
| 200x 4.6 mm | XPtC18-300-204650 |
| 250x 4.6 mm | XPtC18-300-254650 |

## BioPulite® XP Protein tC4 色谱柱

XP Protein tC4采用杂化硅胶技术,提升了色谱柱可耐受的pH与温度范围,在pH1-10的范围内稳定,适用于大小不同、疏水性和等电点各异的蛋白质分离。

| 固定相            | 键合相                                                                               | 碳载量 | 比表面积 | 封端  | 孔径   | 可选粒径               | USP分类 | pH范围 | 温度上限                            |
|----------------|-----------------------------------------------------------------------------------|-----|------|-----|------|--------------------|-------|------|---------------------------------|
| XP Protein tC4 |  | 8%  | 100  | Yes | 300Å | 1.7,2.5<br>3.5,5µm | L26   | 1-12 | 80°C (Low pH)<br>50°C (High pH) |

### BioPulite® XP Protein tC4 订购信息

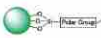
| 可选粒径:1.7µm   |                   | 可选粒径:2.5µm   |                   | 可选粒径:3.5µm   |                  |
|--------------|-------------------|--------------|-------------------|--------------|------------------|
| 规格           | 货号 (P/N)          | 规格           | 货号 (P/N)          | 规格           | 货号 (P/N)         |
| 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 |

| 可选粒径:5µm     |                  |
|--------------|------------------|
| 规格           | 货号 (P/N)         |
| 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 色谱柱

XP Protein RP18能兼容并耐受100%水相, 适用于反相条件高水相或纯水相时分析一些极性较大的肽和蛋白。

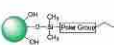
| 固定相             | 键合相                                                                               | 碳载量 | 比表面积 | 封端  | 孔径   | 可选粒径     | USP分类 | pH范围 | 温度上限                            |
|-----------------|-----------------------------------------------------------------------------------|-----|------|-----|------|----------|-------|------|---------------------------------|
| XP Protein RP18 |  | 12% | 100  | Yes | 300Å | 3.5, 5µm | L1    | 2-11 | 50°C (Low pH)<br>45°C (High pH) |

### BioPulite® XP Protein RP18 订购信息

| 可选粒径: 3.5 µm |                  | 可选粒径: 5 µm  |                  |
|--------------|------------------|-------------|------------------|
| 规格           | 货号 (P/N)         | 规格          | 货号 (P/N)         |
| 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 |
| 30x 3.0 mm   | XPR18-300-033035 | 30x 3.0 mm  | XPR18-300-033050 |
| 50x 3.0 mm   | XPR18-300-053035 | 50x 3.0 mm  | XPR18-300-053050 |
| 100x 3.0 mm  | XPR18-300-103035 | 100x 3.0 mm | XPR18-300-103050 |
| 150x 3.0 mm  | XPR18-300-153035 | 150x 3.0 mm | XPR18-300-153050 |
| 250x 3.0 mm  | XPR18-300-253035 | 250x 3.0 mm | XPR18-300-253050 |
| 30x 4.6 mm   | XPR18-300-034635 | 30x 4.6 mm  | XPR18-300-034650 |
| 50x 4.6 mm   | XPR18-300-054635 | 50x 4.6 mm  | XPR18-300-054650 |
| 100x 4.6 mm  | XPR18-300-104635 | 100x 4.6 mm | XPR18-300-104650 |
| 150x 4.6 mm  | XPR18-300-154635 | 150x 4.6 mm | XPR18-300-154650 |
| 200x 4.6 mm  | XPR18-300-204635 | 200x 4.6 mm | XPR18-300-204650 |
| 250x 4.6 mm  | XPR18-300-254635 | 250x 4.6 mm | XPR18-300-254650 |

## BioPulite® XP Protein RP18 Plus 色谱柱

XP Protein RP18 Plus都能兼容并耐受100%水相, 适用于反相条件高水相或纯水相时, 分析一些极性较大的肽和蛋白。

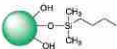
| 固定相                  | 键合相                                                                               | 碳载量 | 比表面积 | 封端  | 孔径   | 可选粒径     | USP分类 | pH范围 | 温度上限                            |
|----------------------|-----------------------------------------------------------------------------------|-----|------|-----|------|----------|-------|------|---------------------------------|
| XP Protein RP18 Plus |  | 17% | 100  | Yes | 300Å | 3.5, 5µm | L1    | 2-11 | 50°C (Low pH)<br>45°C (High pH) |

### BioPulite® XP Protein RP18 Plus 订购信息

| 可选粒径: 3.5 µm |                   | 可选粒径: 5 µm  |                   |
|--------------|-------------------|-------------|-------------------|
| 规格           | 货号 (P/N)          | 规格          | 货号 (P/N)          |
| 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 |
| 150x 2.1 mm  | XPR18P-300-152135 | 150x 2.1 mm | XPR18P-300-152150 |
| 30x 3.0 mm   | XPR18P-300-033035 | 30x 3.0 mm  | XPR18P-300-033050 |
| 50x 3.0 mm   | XPR18P-300-053035 | 50x 3.0 mm  | XPR18P-300-053050 |
| 100x 3.0 mm  | XPR18P-300-103035 | 100x 3.0 mm | XPR18P-300-103050 |
| 150x 3.0 mm  | XPR18P-300-153035 | 150x 3.0 mm | XPR18P-300-153050 |
| 250x 3.0 mm  | XPR18P-300-253035 | 250x 3.0 mm | XPR18P-300-253050 |
| 30x 4.6 mm   | XPR18P-300-034635 | 30x 4.6 mm  | XPR18P-300-034650 |
| 50x 4.6 mm   | XPR18P-300-054635 | 50x 4.6 mm  | XPR18P-300-054650 |
| 100x 4.6 mm  | XPR18P-300-104635 | 100x 4.6 mm | XPR18P-300-104650 |
| 150x 4.6 mm  | XPR18P-300-154635 | 150x 4.6 mm | XPR18P-300-154650 |
| 200x 4.6 mm  | XPR18P-300-204635 | 200x 4.6 mm | XPR18P-300-204650 |
| 250x 4.6 mm  | XPR18P-300-254635 | 250x 4.6 mm | XPR18P-300-254650 |

## BioPulite® Gold Protein C4 色谱柱

高纯硅胶基质的C4色谱柱, 高性价比, 主要用于蛋白质的分离。

| 固定相             | 键合相                                                                               | 碳载量  | 比表面积 | 封端  | 孔径   | 可选粒径  | USP分类 | pH范围 | 温度上限                            |
|-----------------|-----------------------------------------------------------------------------------|------|------|-----|------|-------|-------|------|---------------------------------|
| Gold Protein C4 |  | 1.3% | 100  | Yes | 300Å | 3,5µm | L26   | 2-8  | 60°C (Low pH)<br>40°C (High pH) |

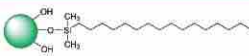
### BioPulite® Gold Protein C4 订购信息

| 可选粒径: 3µm    |                 |
|--------------|-----------------|
| 规格           | 货号 (P/N)        |
| 30x 2.1 mm   | GDC4-300-032130 |
| 50x 2.1 mm   | GDC4-300-052130 |
| 100x 2.1 mm  | GDC4-300-102130 |
| 150 x 2.1 mm | GDC4-300-152130 |
| 30 x 3.0 mm  | GDC4-300-033030 |
| 50 x 3.0 mm  | GDC4-300-053030 |
| 100 x 3.0 mm | GDC4-300-103030 |
| 150 x 3.0 mm | GDC4-300-153030 |
| 250 x 3.0 mm | GDC4-300-253030 |
| 30 x 4.6 mm  | GDC4-300-034630 |
| 50 x 4.6 mm  | GDC4-300-054630 |
| 100 x 4.6 mm | GDC4-300-104630 |
| 150 x 4.6 mm | GDC4-300-154630 |
| 200 x 4.6 mm | GDC4-300-204630 |
| 250 x 4.6 mm | GDC4-300-254630 |

| 可选粒径: 5 µm   |                 |
|--------------|-----------------|
| 规格           | 货号 (P/N)        |
| 30x 2.1 mm   | GDC4-300-032150 |
| 50x 2.1 mm   | GDC4-300-052150 |
| 100x 2.1 mm  | GDC4-300-102150 |
| 150 x 2.1 mm | GDC4-300-152150 |
| 30 x 3.0 mm  | GDC4-300-033050 |
| 50 x 3.0 mm  | GDC4-300-053050 |
| 100 x 3.0 mm | GDC4-300-103050 |
| 150 x 3.0 mm | GDC4-300-153050 |
| 250 x 3.0 mm | GDC4-300-253050 |
| 30 x 4.6 mm  | GDC4-300-034650 |
| 50 x 4.6 mm  | GDC4-300-054650 |
| 100 x 4.6 mm | GDC4-300-104650 |
| 150 x 4.6 mm | GDC4-300-154650 |
| 200 x 4.6 mm | GDC4-300-204650 |
| 250 x 4.6 mm | GDC4-300-254650 |

## BioPulite® Gold Protein C18 色谱柱

Gold Protein C18是高纯硅胶基质、孔径为300Å的反相色谱柱,pH使用范围2-8,是生物大分子分析的高性价比之选。

| 固定相              | 键合相                                                                               | 碳载量  | 比表面积 | 封端  | 孔径   | 可选粒径   | USP分类 | pH范围 | 温度上限                            |
|------------------|-----------------------------------------------------------------------------------|------|------|-----|------|--------|-------|------|---------------------------------|
| Gold Protein C18 |  | 8.5% | 100  | Yes | 300Å | 3,5 µm | L1    | 2-8  | 60°C (Low pH)<br>40°C (High pH) |

### ◆应用案例

#### 鲑降钙素有关物质的测定

方法:《中国药典》2020 版

色谱柱:MicroPulite® Gold C18 300Å 5µm 250\*4.6mm (货号:GDC18-300-254650)

检测器:UV 220nm

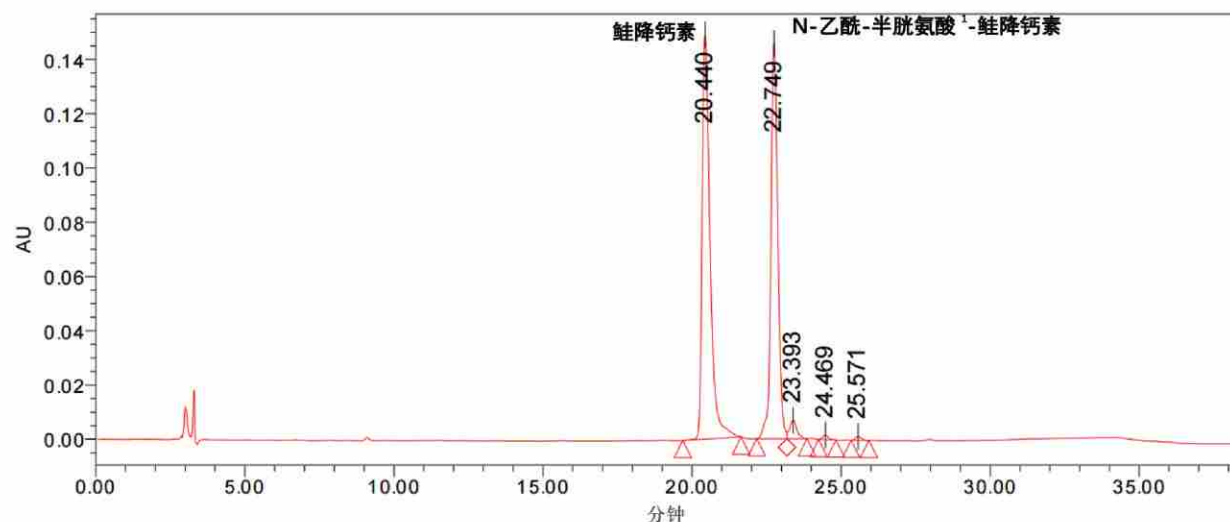
流速:1.0mL/min

柱温:40°C

流动相:A相:0.02mol/L 四甲基氢氧化铵溶液(用磷酸调节 pH 值至 2.5)-乙腈=(9:1);B相:0.02mol/L 四甲基氢氧化铵溶液(用磷酸调节 pH 值至 2.5)-乙腈=(2:3)

| 时间(分钟) | A% | B% |
|--------|----|----|
| 0      | 72 | 28 |
| 30     | 48 | 52 |
| 32     | 72 | 28 |
| 55     | 72 | 28 |

色谱图:



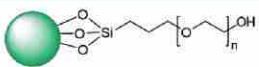
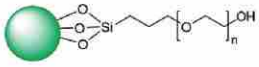
## BioPulite® Gold Protein C18 订购信息

| 可选粒径:3μm    |                  |
|-------------|------------------|
| 规格          | 货号 (P/N)         |
| 30x 2.1 mm  | GDC18-300-032130 |
| 50x 2.1 mm  | GDC18-300-052130 |
| 100x 2.1 mm | GDC18-300-102130 |
| 150x 2.1 mm | GDC18-300-152130 |
| 30x 3.0 mm  | GDC18-300-033030 |
| 50x 3.0 mm  | GDC18-300-053030 |
| 100x 3.0 mm | GDC18-300-103030 |
| 150x 3.0 mm | GDC18-300-153030 |
| 250x 3.0 mm | GDC18-300-253030 |
| 30x 4.6 mm  | GDC18-300-034630 |
| 50x 4.6 mm  | GDC18-300-054630 |
| 100x 4.6 mm | GDC18-300-104630 |
| 150x 4.6 mm | GDC18-300-154630 |
| 200x 4.6 mm | GDC18-300-204630 |
| 250x 4.6 mm | GDC18-300-254630 |

| 可选粒径:5μm    |                  |
|-------------|------------------|
| 规格          | 货号 (P/N)         |
| 30x 2.1 mm  | GDC18-300-032150 |
| 50x 2.1 mm  | GDC18-300-052150 |
| 100x 2.1 mm | GDC18-300-102150 |
| 150x 2.1 mm | GDC18-300-152150 |
| 30x 3.0 mm  | GDC18-300-033050 |
| 50x 3.0 mm  | GDC18-300-053050 |
| 100x 3.0 mm | GDC18-300-103050 |
| 150x 3.0 mm | GDC18-300-153050 |
| 250x 3.0 mm | GDC18-300-253050 |
| 30x 4.6 mm  | GDC18-300-034650 |
| 50x 4.6 mm  | GDC18-300-054650 |
| 100x 4.6 mm | GDC18-300-104650 |
| 150x 4.6 mm | GDC18-300-154650 |
| 200x 4.6 mm | GDC18-300-204650 |
| 250x 4.6 mm | GDC18-300-254650 |

## BioPulite® Protein Perfect SEC

Protein Perfect SEC是纯硅胶基质的体积排阻色谱柱,固定相表面为硅胶表面键合亲水性的高分子聚合物,能有效地分离生物大分子化合物(如蛋白质、多肽、寡核苷酸等)。目前Protein Perfect SEC可提供125 Å、300 Å孔径可供选择,适用于不同分子量级别的生物大分子分析。

| 固定相                 | 键合相                                                                               | 比表面积 | 封端 | 孔径    | 可选粒径 | USP分类 | pH范围 | 温度上限           |
|---------------------|-----------------------------------------------------------------------------------|------|----|-------|------|-------|------|----------------|
| Protein Perfect SEC |  | 300  | 否  | 125 Å | 5µm  | L33   | 2-8  | 45°C (Low pH)  |
| Protein Perfect SEC |  | 100  | 否  | 300 Å | 5µm  | L33   | 2-8  | 45°C (High pH) |

| 固定相                     | 蛋白分子量范围        | 水溶性聚合物分子量范围  |
|-------------------------|----------------|--------------|
| 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 订购信息

| 可选粒径:5µm  |                   |
|-----------|-------------------|
| 规格        | 货号 (P/N)          |
| 250*4.6mm | PFTSEC-125-254650 |
| 300*7.8mm | PFTSEC-125-307850 |

| 可选粒径:5µm  |                   |
|-----------|-------------------|
| 规格        | 货号 (P/N)          |
| 250*4.6mm | PFTSEC-300-254650 |
| 300*7.8mm | PFTSEC-300-307850 |

### ◆应用案例

法罗培南钠有关物质II测定

方法:《中国药典》

色谱柱:BioPulite® Protein Perfect SEC 300 5µm 300\*7.8mm(货号:PFTSEC-300-307850)

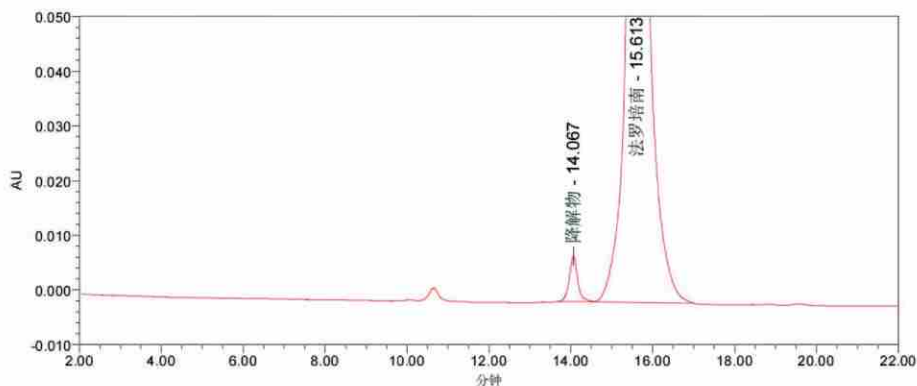
检测器:UV 220nm

流速:0.6mL/min

柱温:室温

流动相:磷酸盐缓冲液(pH 7.0)[0.005mol/L 磷酸氢二钠溶液-0.005mol/L 磷酸二氢钠溶液(61:39)]- 乙腈(95:5)

色谱图:



## MicroPulite® Peptide 系列多肽专用柱

MicroPulite® Peptide系列用于反相色谱中肽的分离与分析。XP tC18、PHS XP tC18采用专利授权耐宽pH范围的杂化硅胶、三键修饰技术和特有双封尾方式,对高pH、高温的耐受性更好,同时能为分析物提供更尖锐、优异的峰形。HSS T3采用高强度硅胶,增强了极性大的肽分析物的保留。

- 优异的峰形—独特的杂化硅胶、专利三键修饰和特有封尾,使色谱柱性能优异
- 不同的选择性—满足各种性质多肽的选择性分离需求,可改善关键组分和肽分离
- 更高的灵活性—多种尺寸可兼容高效液相色谱和超高效液相色谱系统
- 重现性好—严格质控标准,填料和色谱柱批次之间的稳定

| 固定相            | 键合相  | 碳载量 | 孔径   | 可选粒径            | USP分类 | pH范围 |
|----------------|------|-----|------|-----------------|-------|------|
| Peptide XP     | tC18 | 18% | 130Å | 1.7、2.5、3.5、5µm | L1    | 1-12 |
| Peptide PHS XP | tC18 | 15% | 130Å | 1.7、2.5、3.5、5µm | L1    | 1-11 |
| Peptide HSS    | T3   | 11% | 100Å | 1.8、2.5、3.5、5µm | L1    | 1-8  |

### ◆应用案例

#### 样品信息

血管紧张素Angiotensinogen(1-7)DRVYIHP、缓激肽RPPGFSPFR、血管紧张素IDRVYIHPFHL、血管紧张素IIDRVYIHPF

#### 检测条件

波长=220nm

A相 0.1%TFA 水

B相 0.1%TFA 乙腈

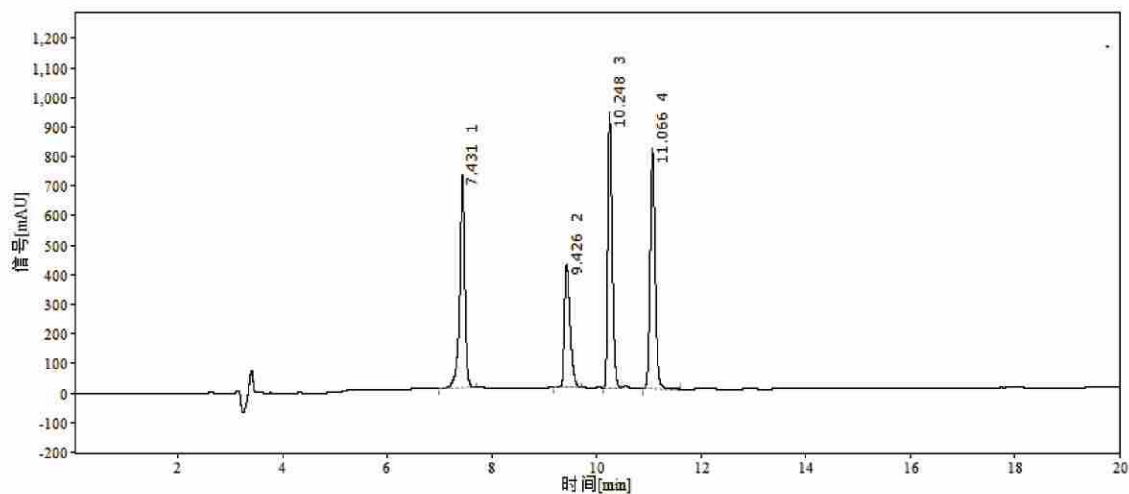
#### 色谱柱

MicroPulite® Peptide XP tC18 4.6\*250mm

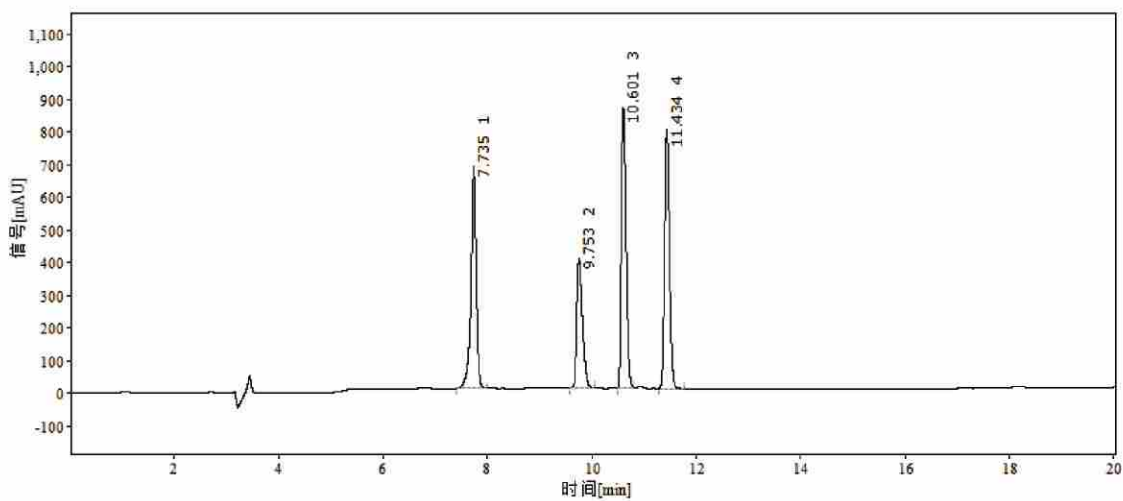
MicroPulite® Peptide HSS T3 4.6\*250mm

MicroPulite® Peptide PHS XP tC18 4.6\*250mm

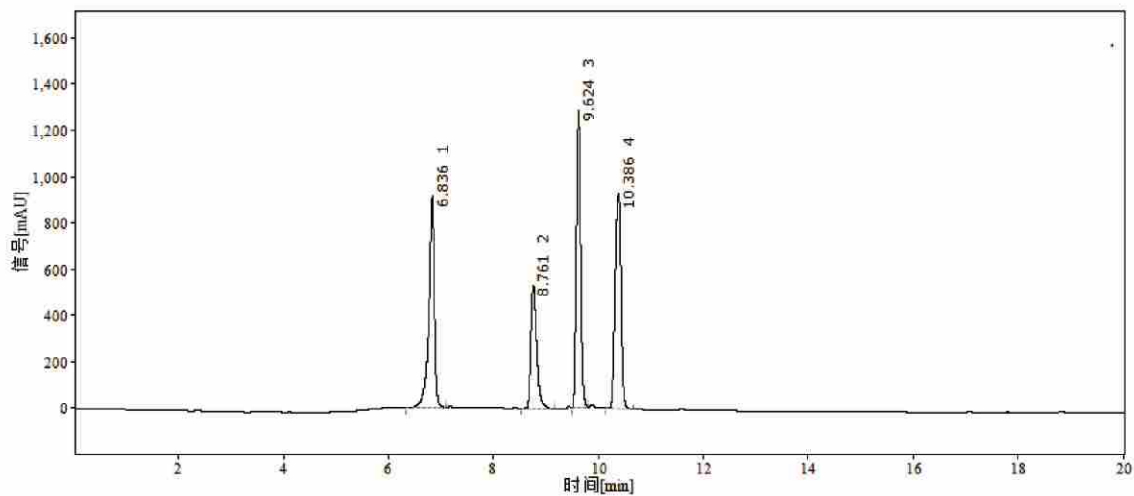
色谱图:



MicroPulite® Peptide XP tC18 混标



MicroPulite® Peptide HSS T3 混标



MicroPulite® Peptide PHS XP tC18 混标

## WeChromlite®系列保护柱

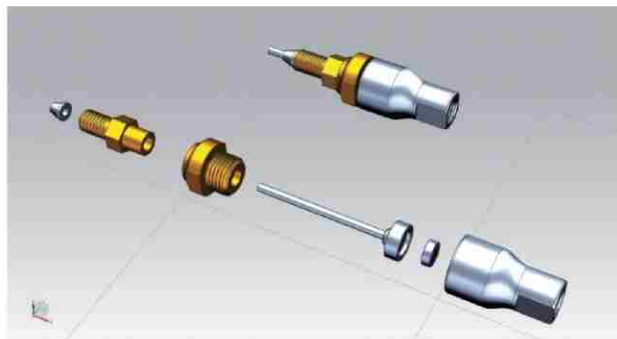
在液相色谱柱前端安装在线过滤器或保护柱对维护液相系统运行、延长色谱柱寿命具有重要意义。在线过滤器内有具有一定孔径的筛板,能有效拦截流动相和样品中大于筛板孔径的微小颗粒杂质。保护柱的柱芯有与分析柱一致的填料,能减轻样品或流动相对色谱柱前端的污染,从而延长分析柱的使用寿命。

微纯生物科技提供保护柱连接件结构简单,使用方便,连接体积小,拆卸方便,适合制剂、中药、食品、环境等一些列复杂样品分析。

| 保护柱规格    | 推荐的色谱柱内径    |
|----------|-------------|
| 2.1*4mm  | 2.1mm       |
| 3*4mm    | 3mm         |
| 4.6*10mm | 3.9mm/4.6mm |
| 10*10    | 10mm        |
| 20*10    | 20mm        |
| 30*10    | 30mm        |

### 在线过滤器

在线过滤器通过物理过滤的方式去除样品或流动相中的颗粒物,保护色谱柱、泵与管路不被堵塞。微纯该款在线过滤器主要用于UPLC仪器系统,在线过滤器中的筛板是不锈钢材质,能耐受18000psi的高压。当出现色谱柱柱压增加很快、色谱峰峰形拖尾、分叉等现象时,可将色谱柱卸下,先排查压力高是否由在线过滤器引起。如在线过滤器压力高,推测是在线过滤器中的筛板堵塞,则需更换在线过滤器中的筛板。



| UPLC 在线过滤器套装 | 货号        | 描述                                                             |
|--------------|-----------|----------------------------------------------------------------|
|              | 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 |

### 直连式保护柱

直连式保护柱可直接连接在HPLC/UHPLC/UPLC分析柱上使用,无需额外的管路连接,死体积小,使用方便。直连式保护柱由保护柱卡套和柱芯两部分组成。保护柱卡套材质为不锈钢,适用于不同厂家的液相色谱仪器,并且可重复使用;保护柱芯需要定期更换,并建议使用与色谱柱填料相同的保护柱芯。

| 保护柱卡套货号 | 规格        | 保护柱芯规格  | 操作压力  |
|---------|-----------|---------|-------|
| G21     | 2.1mm     | 2.1*4mm | 18000 |
| G30     | 3mm       | 3*4mm   | 9000  |
| G46     | 4.6/3.9mm | 4.6*4mm | 6000  |



## 半制备分体式保护柱

分体式保护柱需要通过接头和连接管路,才能和色谱柱连接起来。微纯分体式保护柱主要用于半制备柱,安装简易,不易发生故障。同样,保护柱芯也建议选择与半制备色谱柱填料相同的,不同规格的柱芯对应的保护柱卡套也有所不同。



| 保护柱卡套货号 | 规格   | 保护柱芯规格  | 操作压力 |
|---------|------|---------|------|
| G100    | 10mm | 10*10mm | 6000 |
| G200    | 20mm | 20*10mm | 6000 |
| G300    | 30mm | 30*10mm | 6000 |

## HPLC 保护柱不影响柱压与柱效

- 延长色谱柱寿命
- 色谱结果几乎无变化
- 易于使用

| Description          | 规格              | Backpressure   | Efficiency | Peak Asym |
|----------------------|-----------------|----------------|------------|-----------|
| MicroPulite® XP tC18 | 4.6*250 mm, 5μm | 6.7MPa (接保护柱)  | 102333.67  | 1.09      |
|                      |                 | 6.5MPa (不接保护柱) | 96362.56   | 1.10      |

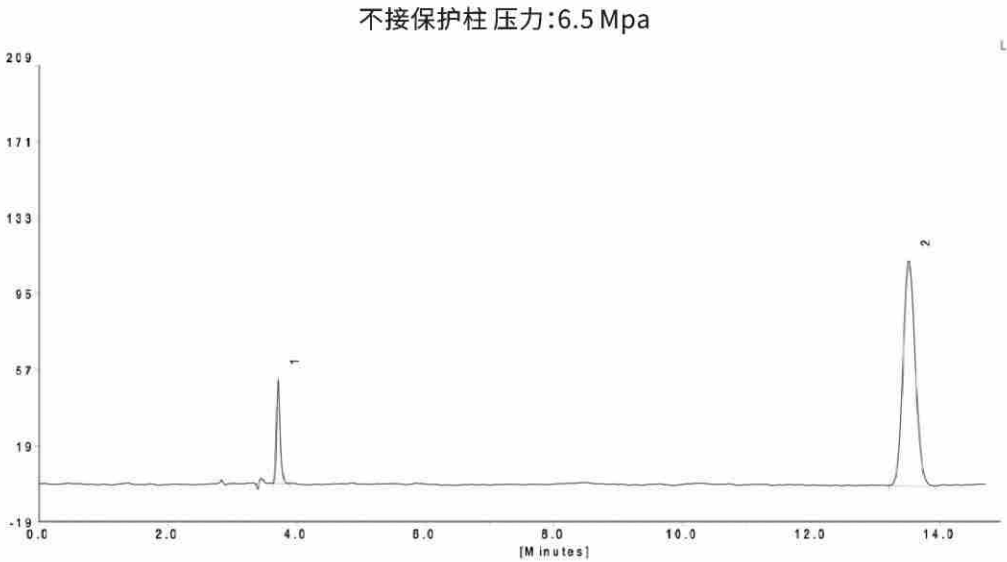
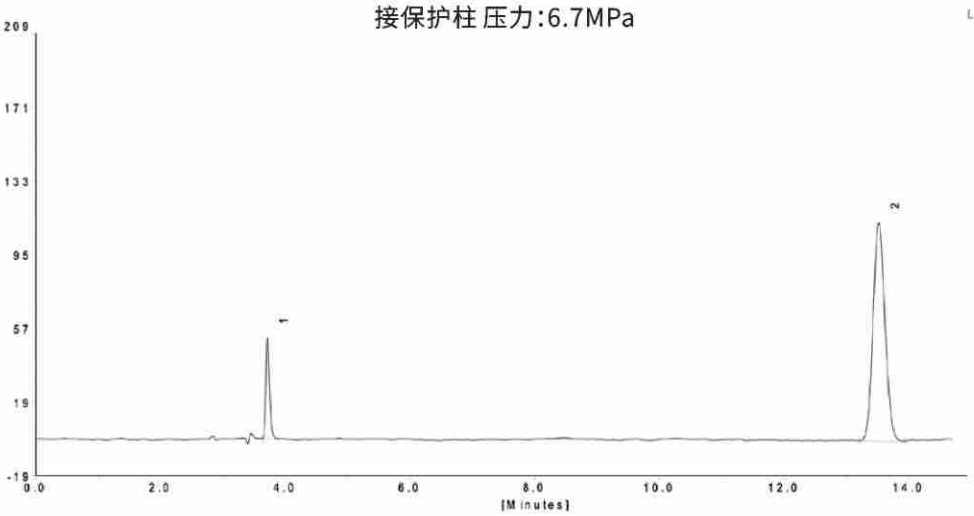
### 色谱条件

流动相:A:纯水 B:乙腈

流速:0.8mL/min

柱温:25°C

检测波长:254nm



◎ 产品与货号

| 产品名称                   | 货号     | 规格 (mm) (匹配色谱柱内径)                                                        |
|------------------------|--------|--------------------------------------------------------------------------|
| Wechromlite<br>系列保护柱柱芯 | GC-21  | Wechromlite Direct connect Analytical guard Holder ( Φ: 2.1mm)           |
|                        | GC-30  | Wechromlite Direct connect Analytical guard Holder ( Φ: 3.0mm)           |
|                        | GC-46  | Wechromlite Direct connect Analytical guard Holder ( Φ: 4.6mm)           |
|                        | GC-100 | Wechromlite Stand Alone semi-preparation guard Holder ( Φ: 10mm)         |
|                        | GC-190 | Wechromlite Stand Alone semi-preparation guard Holder ( Φ: 20/21.2/30mm) |
|                        | GC-200 | Wechromlite Stand Alone semi-preparation guard Holder ( Φ: 20mm)         |
|                        | GC-300 | Wechromlite Stand Alone semi-preparation guard Holder ( Φ: 30mm/50mm)    |

| 产品名称                   | 货号                     | 固定相种类+粒径+匹配色谱柱内径+规格(匹配色谱柱内径)+数量                                                                |
|------------------------|------------------------|------------------------------------------------------------------------------------------------|
| Wechromlite<br>系列保护柱柱芯 | GC-XPtC18-214017-3P    | Wechromlite Guard column Cartridge XP tC18 1.7µm 3pk (2.1mm内径色谱柱)                              |
|                        | GC-XPtC18-304017-3P    | Wechromlite Guard column Cartridge XP tC18 1.7µm 3pk (3.0mm内径色谱柱)                              |
|                        | GC-XPtC18-214025-3P    | Wechromlite Guard column Cartridge XP tC18 2.5µm 3pk (2.1mm内径色谱柱)                              |
|                        | GC-XPtC18-304025-3P    | Wechromlite Guard column Cartridge XP tC18 2.5µm 3pk (3.0mm内径色谱柱)                              |
|                        | GC-XPtC18-4610025-3P   | Wechromlite Guard column Cartridge XP tC18 2.5µm 3pk (4.6mm内径色谱柱)                              |
|                        | GC-XPtC18-214030-3P    | Wechromlite Guard column Cartridge XP tC18 3µm 3pk (2.1mm内径色谱柱)                                |
|                        | GC-XPtC18-304030-3P    | Wechromlite Guard column Cartridge XP tC18 3µm 3pk (3.0mm内径色谱柱)                                |
|                        | GC-XPtC18-4610030-3P   | Wechromlite Guard column Cartridge XP tC18 3µm 3pk (4.6mm内径色谱柱)                                |
|                        | GC-XPtC18-214035-3P    | Wechromlite Guard column Cartridge XP tC18 3.5µm 3pk (2.1mm内径色谱柱)                              |
|                        | GC-XPtC18-304035-3P    | Wechromlite Guard column Cartridge XP tC18 3.5µm 3pk (3.0mm内径色谱柱)                              |
|                        | GC-XPtC18-461035-3P    | Wechromlite Guard column Cartridge XP tC18 3.5µm 3pk (4.6mm内径色谱柱)                              |
|                        | GC-XPtC18-214050-3P    | Wechromlite Guard column Cartridge XP tC18 5µm 3pk (2.1mm内径色谱柱)                                |
|                        | GC-XPtC18-304050-3P    | Wechromlite Guard column Cartridge XP tC18 5µm 3pk (3.0mm内径色谱柱)                                |
|                        | GC-XPtC18-4610050-3P   | Wechromlite Guard column Cartridge XP tC18 5µm 3pk (4.6mm内径色谱柱)                                |
|                        | GC-XPtC18-10010050-1P  | Wechromlite Guard column Cartridge XP tC18 5µm 1pk (10mm内径色谱柱)                                 |
|                        | GC-XPtC18-19010050-1P  | Wechromlite Guard column Cartridge XP tC18 5µm 1pk (20mm/21.2mm/30mm内径色谱柱)                     |
|                        | GC-XPtC18-20010050-1P  | Wechromlite Guard column Cartridge XP tC18 5µm 1pk (20mm内径色谱柱)                                 |
|                        | GC-XPtC18-30010050-1P  | Wechromlite Guard column Cartridge XP tC18 5µm 1pk (30mm/50mm内径色谱柱)                            |
|                        | GC-XPtC18-10010070-1P  | Wechromlite Guard column Cartridge XP tC18 7µm 1pk (10mm内径色谱柱)                                 |
|                        | GC-XPtC18-19010070-1P  | Wechromlite Guard column Cartridge XP tC18 7µm 1pk (20mm/21.2mm/30mm内径色谱柱)                     |
|                        | GC-XPtC18-20010070-1P  | Wechromlite Guard column Cartridge XP tC18 7µm 1pk (20mm内径色谱柱)<br>(新客户推荐GC-XPtC18-19010050-1P) |
|                        | GC-XPtC18-30010070-1P  | Wechromlite Guard column Cartridge XP tC18 7µm 1pk (30mm内径色谱柱)                                 |
|                        | GC-XPtC18-100100100-1P | Wechromlite Guard column Cartridge XP tC18 10µm 1pk (10mm内径色谱柱)                                |
|                        | GC-XPtC18-190100100-1P | Wechromlite Guard column Cartridge XP tC18 10µm 1pk (20/21.2/30mm内径色谱柱)                        |
|                        | GC-XPtC18-200100100-1P | Wechromlite Guard column Cartridge XP tC18 10µm 1pk (20mm内径色谱柱)                                |
|                        | GC-XPtC18-300100100-1P | Wechromlite Guard column Cartridge XP tC18 10µm 1pk (30mm/50mm内径色谱柱)                           |
|                        | GC-GDC18-214030-3P     | Wechromlite Guard column Cartridge Gold C18 3µm 2.1*4mm 3pk (2.1mm内径色谱柱)                       |

| 产品名称                   | 货号                    | 固定相种类+粒径+匹配色谱柱内径+规格（匹配色谱柱内径）+数量                                                                       |
|------------------------|-----------------------|-------------------------------------------------------------------------------------------------------|
| Wechromlite<br>系列保护柱柱芯 | GC-GDC18-304030-3P    | Wechromlite Guard column Cartridge Gold C18 3μm 3.0*4mm 3pk (3.0mm内径色谱柱)                              |
|                        | GC-GDC18-4610030-3P   | Wechromlite Guard column Cartridge Gold C18 3μm 4.6*10mm 3pk (4.6mm内径色谱柱)                             |
|                        | GC-GDC18-214035-3P    | Wechromlite Guard column Cartridge Gold C18 3.5μm 2.1*4mm 3pk (2.1mm内径色谱柱)                            |
|                        | GC-GDC18-214035-3P    | Wechromlite Guard column Cartridge Gold C18 3.5μm 3.0*4mm 3pk (3.0mm内径色谱柱)                            |
|                        | GC-GDC18-4610035-3P   | Wechromlite Guard column Cartridge Gold C18 3.5μm 4.6*10mm 3pk (4.6mm内径色谱柱)                           |
|                        | GC-GDC18-214050-3P    | Wechromlite Guard column Cartridge Gold C18 5μm 2.1*4mm 3pk (2.1mm内径色谱柱)                              |
|                        | GC-GDC18-304050-3P    | Wechromlite Guard column Cartridge Gold C18 5μm 3.0*4mm 3pk (3.0mm内径色谱柱)                              |
|                        | GC-GDC18-4610050-3P   | Wechromlite Guard column Cartridge Gold C18 5μm 4.6*10mm 3pk (4.6mm内径色谱柱)                             |
|                        | GC-GDC18-10010050-1P  | Wechromlite Guard column Cartridge Gold C18 5μm 10*10mm 1pk (10mm内径色谱柱)                               |
|                        | GC-GDC18-19010050-1P  | Wechromlite Guard column Cartridge Gold C18 5μm 19*10mm 1pk (10mm内径色谱柱)<br>(匹配20mm/21.2mm/30mm内径色谱柱)  |
|                        | GC-GDC18-20010050-1P  | Wechromlite Guard column Cartridge Gold C18 5μm 20*10mm 1pk (20mm内径色谱柱)                               |
|                        | GC-GDC18-30010050-1P  | Wechromlite Guard column Cartridge Gold C18 5μm 30*10mm 1pk (30mm内径色谱柱)                               |
|                        | GC-GDC18-10010070-1P  | Wechromlite Guard column Cartridge Gold C18 7μm 10*10mm 1pk (10mm内径色谱柱)                               |
|                        | GC-GDC18-19010070-1P  | Wechromlite Guard column Cartridge Gold C18 7μm 19*10mm 1pk (10mm内径色谱柱)<br>(匹配20mm/21.2mm/30mm内径色谱柱)  |
|                        | GC-GDC18-20010070-1P  | Wechromlite Guard column Cartridge Gold C18 7μm 20*10mm 1pk (20mm内径色谱柱)                               |
|                        | GC-GDC18-30010070-1P  | Wechromlite Guard column Cartridge Gold C18 7μm 30*10mm 1pk (30mm内径色谱柱)                               |
|                        | GC-GDC18-100100100-1P | Wechromlite Guard column Cartridge Gold C18 10μm 10*10mm 1pk (10mm内径色谱柱)                              |
|                        | GC-GDC18-190100100-1P | Wechromlite Guard column Cartridge Gold C18 10μm 19*10mm 1pk (10mm内径色谱柱)<br>(匹配20mm/21.2mm/30mm内径色谱柱) |
|                        | GC-GDC18-200100100-1P | Wechromlite Guard column Cartridge Gold C18 10μm 20*10mm 1pk (20mm内径色谱柱)                              |
|                        | GC-GDC18-300100100-1P | Wechromlite Guard column Cartridge Gold C18 10μm 30*10mm 1pk (30mm内径色谱柱)                              |
|                        | GC-HST3-214018-3P     | Wechromlite Guard column Cartridge HSS T3 1.8μm 2.1*4mm 3pk (2.1mm内径色谱柱)                              |
|                        | GC-HST3-304018-3P     | Wechromlite Guard column Cartridge HSS T3 1.8μm 3.0*4mm 3pk (3.0mm内径色谱柱)                              |
|                        | GC-HST3-214025-3P     | Wechromlite Guard column Cartridge HSS T3 2.5μm 2.1*4mm 3pk (2.1mm内径色谱柱)                              |
|                        | GC-HST3-304025-3P     | Wechromlite Guard column Cartridge HSS T3 2.5μm 3.0*4mm 3pk (3.0mm内径色谱柱)                              |
|                        | GC-HST3-4610025-3P    | Wechromlite Guard column Cartridge HSS T3 2.5μm 4.6*10mm 3pk (4.6mm内径色谱柱)                             |
|                        | GC-HST3-214035-3P     | Wechromlite Guard column Cartridge HSS T3 3.5μm 2.1*4mm 3pk (2.1mm内径色谱柱)                              |
|                        | GC-HST3-304035-3P     | Wechromlite Guard column Cartridge HSS T3 3.5μm 3.0*4mm 3pk (3.0mm内径色谱柱)                              |

| 产品名称                   | 货号                   | 固定相种类+粒径+匹配色谱柱内径+规格 (匹配色谱柱内径)+数量                                                                        |
|------------------------|----------------------|---------------------------------------------------------------------------------------------------------|
| Wechromlite<br>系列保护柱柱芯 | GC-HST3-4610035-3P   | Wechromlite Guard column Cartridge HSS T3 3.5μm 4.6*10mm 3pk (4.6mm内径色谱柱)                               |
|                        | GC-PFT3-214030-3P    | Wechromlite Guard column Cartridge Perfect T3 3μm 2.1*4mm 3pk (2.1mm内径色谱柱)                              |
|                        | GC-PFT3-304030-3P    | Wechromlite Guard column Cartridge Perfect T3 3μm 3.0*4mm 3pk (3.0mm内径色谱柱)                              |
|                        | GC-PFT3-4610030-3P   | Wechromlite Guard column Cartridge Perfect T3 3μm 4.6*10mm 3pk (4.6mm内径色谱柱)                             |
|                        | GC-PFT3-214050-3P    | Wechromlite Guard column Cartridge Perfect T3 5μm 2.1*4mm 3pk (2.1mm内径色谱柱)                              |
|                        | GC-PFT3-304050-3P    | Wechromlite Guard column Cartridge Perfect T3 5μm 3.0*4mm 3pk (3.0mm内径色谱柱)                              |
|                        | GC-PFT3-4610050-3P   | Wechromlite Guard column Cartridge Perfect T3 5μm 4.6*10mm 3pk (4.6mm内径色谱柱)                             |
|                        | GC-PFT3-10010050-1P  | Wechromlite Guard column Cartridge Perfect T3 5μm 10*10mm 1pk (10mm内径色谱柱)                               |
|                        | GC-PFT3-19010050-1P  | Wechromlite Guard column Cartridge Perfect T3 5μm 10*10mm 1pk (19mm内径色谱柱)<br>(匹配20mm/21.2mm/30mm内径色谱柱)  |
|                        | GC-PFT3-20010050-1P  | Wechromlite Guard column Cartridge Perfect T3 5μm 20*10mm 1pk (20mm内径色谱柱)                               |
|                        | GC-PFT3-30010050-1P  | Wechromlite Guard column Cartridge Perfect T3 5μm 30*10mm 1pk (30mm内径色谱柱)                               |
|                        | GC-PFT3-10010070-1P  | Wechromlite Guard column Cartridge Perfect T3 7μm 10*10mm 1pk (10mm内径色谱柱)                               |
|                        | GC-PFT3-19010070-1P  | Wechromlite Guard column Cartridge Perfect T3 7μm 10*10mm 1pk (19mm内径色谱柱)<br>(匹配20mm/21.2mm/30mm内径色谱柱)  |
|                        | GC-PFT3-20010070-1P  | Wechromlite Guard column Cartridge Perfect T3 7μm 20*10mm 1pk (20mm内径色谱柱)                               |
|                        | GC-PFT3-30010070-1P  | Wechromlite Guard column Cartridge Perfect T3 7μm 30*10mm 1pk (30mm内径色谱柱)                               |
|                        | GC-PFT3-100100100-1P | Wechromlite Guard column Cartridge Perfect T3 10μm 10*10mm 1pk (10mm内径色谱柱)                              |
|                        | GC-PFT3-190100100-1P | Wechromlite Guard column Cartridge Perfect T3 10μm 10*10mm 1pk (19mm内径色谱柱)<br>(匹配20mm/21.2mm/30mm内径色谱柱) |
|                        | GC-PFT3-200100100-1P | Wechromlite Guard column Cartridge Perfect T3 10μm 20*10mm 1pk (20mm内径色谱柱)                              |
|                        | GC-PFT3-300100100-1P | Wechromlite Guard column Cartridge Perfect T3 10μm 30*10mm 1pk (30mm内径色谱柱)                              |

## 氨基酸分析

### ◆AQC 柱前衍生氨基酸

6-氨基喹啉-N-羟基琥珀酰亚胺基氨基甲酸酯 (AQC) 能与氨基酸迅速反应, 产物可用紫外检测也可用荧光检测, AQC衍生氨基酸的方法也是近年来应较广泛的衍生方法之一。AQC衍生法具有以下特点:

- AQC试剂与伯胺、仲胺反应, 简单快速
- 衍生产物直接上机分析
- 衍生产物稳定, 常温下可放置一周
- 多余的衍生化试剂会与水缓慢反应, 对氨基酸衍生产物不会产生干扰

### ◆AQCKIT柱前衍生氨基酸方法包

AQCKIT柱前衍生氨基酸方法包包括一根UPLC或HPLC氨基酸分析专用柱和一套AQC Reagent。氨基酸分析专用柱经过专门的质控测试, 用于分离反应所得的氨基酸衍生物。

### ◆AQC Reagent 柱前衍生氨基酸试剂包

提供氨基酸衍生所需的AQC试剂粉末和衍生所需硼酸盐缓冲溶液, 每种试剂各5瓶。

### ◆应用案例

#### 在HPLC仪器上使用的AQC KIT分析17种氨基酸

色谱柱: 氨基酸分析专用柱 3.5 $\mu$ m 4.6\*150mm

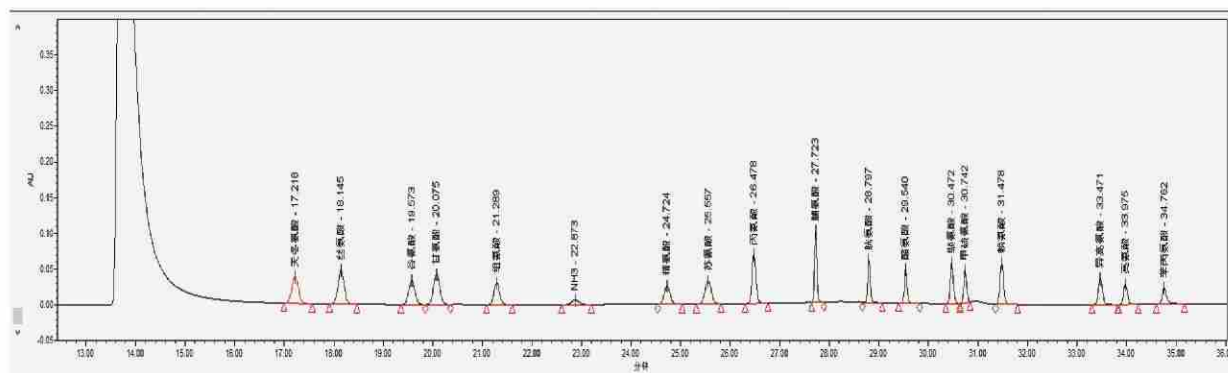
检测波长: UV 260

流速: 1.2mL/min

进样体积: 10 $\mu$ L

柱温: 37 $^{\circ}$ C

色谱图:



## ◆应用案例

### 在UPLC仪器上使用的AQC KIT分析17种氨基酸

色谱柱：氨基酸分析专用柱 1.7 $\mu$ m 2.1\*100mm

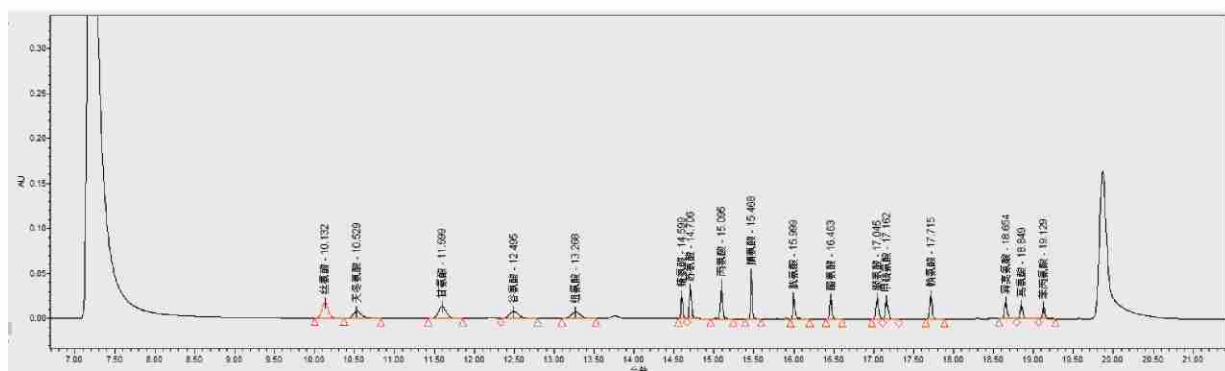
检测波长：UV 260

流速：0.4mL/min

进样体积：1 $\mu$ L

柱温：37 $^{\circ}$ C

色谱图：



## 订购信息

| 产品信息                                                 | 货号          |
|------------------------------------------------------|-------------|
| UPulite® AQC Kit (AQC柱前衍生氨基酸HPLC方法包)                 | WEAQCK-001  |
| UPulite® AQC Kit (AQC柱前衍生氨基酸UPLC方法包)                 | WEAQCK-002  |
| UPulite® AQC Reagent (AQC柱前衍生氨基酸试剂包)                 | WEAQCR-001  |
| UPulite® SP C18-AA (氨基酸分析专用柱, 3.5 $\mu$ m 4.6*150mm) | SP05-154635 |
| UPulite® SP C18-AA (氨基酸分析专用柱, 1.7 $\mu$ m 2.1*100mm) | SP05-102117 |

## 常用缓冲剂的缓冲范围、MS 兼容性和截止波长

| 缓冲剂            | pH缓冲范围    | LC-MS兼容性 | UV截止波长       |
|----------------|-----------|----------|--------------|
| 磷酸盐( $pK_1$ )  | 1.1-3.1   | NO       | <200nm       |
| 磷酸盐( $pK_2$ )  | 6.2-8.2   |          |              |
| 磷酸盐( $pK_3$ )  | 11.3-13.3 |          |              |
| 醋酸盐            | 3.8-5.8   | YES      | 210nm(10mm)  |
| 柠檬酸盐( $pK_1$ ) | 2.1-4.1   | NO       | 230nm(10mm)  |
| 柠檬酸盐( $pK_2$ ) | 3.7-5.7   |          |              |
| 柠檬酸盐( $pK_3$ ) | 4.4-6.4   |          |              |
| 三氟乙酸(0.1%)     | 2.0       | YES      | 210nm        |
| 磷酸(0.1%)       | 2.0       | NO       | 210nm(10mm)  |
| 甲酸(0.1%)       | 2.7       | YES      | <200nm       |
| 甲酸铵            | 2.7-4.7   | YES      | 190nm        |
| 碳酸氢盐           | 5.4-7.4   | YES(铵)   | 210nm(10mm)  |
| 碳酸盐            | 9.2-11.2  | NO(Nak等) | 200nm        |
| 硼酸盐            | 8.3-10.3  | NO       | 190nm        |
| 铵              | 8.2-10.2  | YES      | 200nm(10mm)  |
| 二乙铵            | 9.5-11.5  | NO       | 235nm(10mm)  |
| 三乙铵            | 9.7-11.7  | NO       | <200nm(10mm) |
| 三羟甲基氨基甲烷       | 7.3-9.3   | NO       | 205nm(10mm)  |

## 常用溶剂混溶表

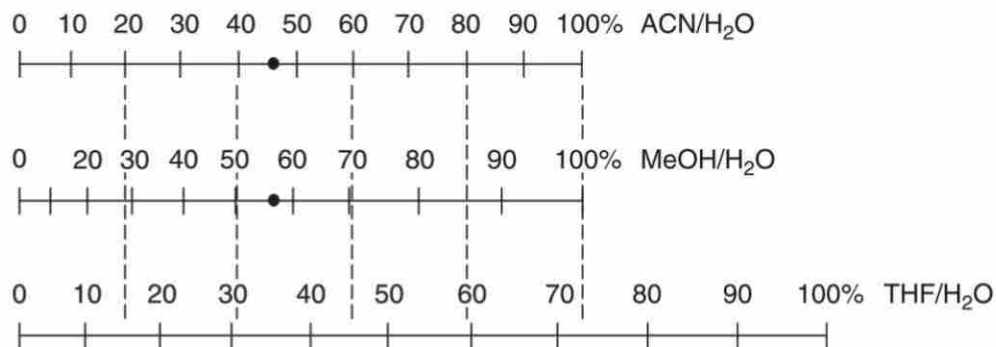
|    | 1                          | 2      | 3      | 4 | 5           | 6                | 7      | 8           | 9           | 10               | 11               | 12                         | 13                    | 14               | 15               | 16     | 17     | 18          | 19          | 20     | 21          | 22          | 23     | 24          | 25          | 26               | 27               | 28     | 29               | 30 | 31          |                            |
|----|----------------------------|--------|--------|---|-------------|------------------|--------|-------------|-------------|------------------|------------------|----------------------------|-----------------------|------------------|------------------|--------|--------|-------------|-------------|--------|-------------|-------------|--------|-------------|-------------|------------------|------------------|--------|------------------|----|-------------|----------------------------|
|    | 乙<br>酸                     | 丙<br>酮 | 乙<br>腈 | 苯 | 正<br>丁<br>醇 | 四<br>氯<br>化<br>碳 | 氯<br>仿 | 环<br>己<br>烷 | 环<br>戊<br>烷 | 二<br>氯<br>乙<br>烷 | 二<br>氯<br>甲<br>烷 | 二<br>甲<br>基<br>甲<br>酰<br>胺 | 二<br>甲<br>基<br>亚<br>砷 | 二<br>氧<br>六<br>环 | 乙<br>酸<br>乙<br>酯 | 乙<br>醇 | 乙<br>醚 | 正<br>庚<br>烷 | 正<br>己<br>烷 | 甲<br>醇 | 甲<br>乙<br>酮 | 异<br>辛<br>烷 | 戊<br>烷 | 异<br>丙<br>醇 | 二<br>丙<br>醚 | 四<br>氯<br>乙<br>烷 | 四<br>氢<br>呋<br>喃 | 甲<br>苯 | 三<br>氯<br>乙<br>烷 | 水  | 二<br>甲<br>苯 |                            |
| 1  | 乙<br>酸                     |        |        |   |             |                  |        |             |             |                  |                  |                            |                       |                  |                  |        |        |             |             |        |             |             |        |             |             |                  |                  |        |                  |    |             | 乙<br>酸                     |
| 2  | 丙<br>酮                     |        |        |   |             |                  |        |             |             |                  |                  |                            |                       |                  |                  |        |        |             |             |        |             |             |        |             |             |                  |                  |        |                  |    |             | 丙<br>酮                     |
| 3  | 乙<br>腈                     |        |        |   |             |                  |        |             |             |                  |                  |                            |                       |                  |                  |        |        |             |             |        |             |             |        |             |             |                  |                  |        |                  |    |             | 乙<br>腈                     |
| 4  | 苯                          |        |        |   |             |                  |        |             |             |                  |                  |                            |                       |                  |                  |        |        |             |             |        |             |             |        |             |             |                  |                  |        |                  |    |             | 苯                          |
| 5  | 正<br>丁<br>醇                |        |        |   |             |                  |        |             |             |                  |                  |                            |                       |                  |                  |        |        |             |             |        |             |             |        |             |             |                  |                  |        |                  |    |             | 正<br>丁<br>醇                |
| 6  | 四<br>氯<br>化<br>碳           |        |        |   |             |                  |        |             |             |                  |                  |                            |                       |                  |                  |        |        |             |             |        |             |             |        |             |             |                  |                  |        |                  |    |             | 四<br>氯<br>化<br>碳           |
| 7  | 氯<br>仿                     |        |        |   |             |                  |        |             |             |                  |                  |                            |                       |                  |                  |        |        |             |             |        |             |             |        |             |             |                  |                  |        |                  |    |             | 氯<br>仿                     |
| 8  | 环<br>己<br>烷                |        |        |   |             |                  |        |             |             |                  |                  |                            |                       |                  |                  |        |        |             |             |        |             |             |        |             |             |                  |                  |        |                  |    |             | 环<br>己<br>烷                |
| 9  | 环<br>戊<br>烷                |        |        |   |             |                  |        |             |             |                  |                  |                            |                       |                  |                  |        |        |             |             |        |             |             |        |             |             |                  |                  |        |                  |    |             | 环<br>戊<br>烷                |
| 10 | 二<br>氯<br>乙<br>烷           |        |        |   |             |                  |        |             |             |                  |                  |                            |                       |                  |                  |        |        |             |             |        |             |             |        |             |             |                  |                  |        |                  |    |             | 二<br>氯<br>乙<br>烷           |
| 11 | 二<br>氯<br>甲<br>烷           |        |        |   |             |                  |        |             |             |                  |                  |                            |                       |                  |                  |        |        |             |             |        |             |             |        |             |             |                  |                  |        |                  |    |             | 二<br>氯<br>甲<br>烷           |
| 12 | 二<br>甲<br>基<br>甲<br>酰<br>胺 |        |        |   |             |                  |        |             |             |                  |                  |                            |                       |                  |                  |        |        |             |             |        |             |             |        |             |             |                  |                  |        |                  |    |             | 二<br>甲<br>基<br>甲<br>酰<br>胺 |
| 13 | 二<br>甲<br>基<br>亚<br>砷      |        |        |   |             |                  |        |             |             |                  |                  |                            |                       |                  |                  |        |        |             |             |        |             |             |        |             |             |                  |                  |        |                  |    |             | 二<br>甲<br>基<br>亚<br>砷      |
| 14 | 二<br>氧<br>六<br>环           |        |        |   |             |                  |        |             |             |                  |                  |                            |                       |                  |                  |        |        |             |             |        |             |             |        |             |             |                  |                  |        |                  |    |             | 二<br>氧<br>六<br>环           |
| 15 | 乙<br>酸<br>乙<br>酯           |        |        |   |             |                  |        |             |             |                  |                  |                            |                       |                  |                  |        |        |             |             |        |             |             |        |             |             |                  |                  |        |                  |    |             | 乙<br>酸<br>乙<br>酯           |
| 16 | 乙<br>醇                     |        |        |   |             |                  |        |             |             |                  |                  |                            |                       |                  |                  |        |        |             |             |        |             |             |        |             |             |                  |                  |        |                  |    |             | 乙<br>醇                     |
| 17 | 乙<br>醚                     |        |        |   |             |                  |        |             |             |                  |                  |                            |                       |                  |                  |        |        |             |             |        |             |             |        |             |             |                  |                  |        |                  |    |             | 乙<br>醚                     |
| 18 | 正<br>庚<br>烷                |        |        |   |             |                  |        |             |             |                  |                  |                            |                       |                  |                  |        |        |             |             |        |             |             |        |             |             |                  |                  |        |                  |    |             | 正<br>庚<br>烷                |
| 19 | 正<br>己<br>烷                |        |        |   |             |                  |        |             |             |                  |                  |                            |                       |                  |                  |        |        |             |             |        |             |             |        |             |             |                  |                  |        |                  |    |             | 正<br>己<br>烷                |
| 20 | 甲<br>醇                     |        |        |   |             |                  |        |             |             |                  |                  |                            |                       |                  |                  |        |        |             |             |        |             |             |        |             |             |                  |                  |        |                  |    |             | 甲<br>醇                     |
| 21 | 甲<br>乙<br>酮                |        |        |   |             |                  |        |             |             |                  |                  |                            |                       |                  |                  |        |        |             |             |        |             |             |        |             |             |                  |                  |        |                  |    |             | 甲<br>乙<br>酮                |
| 22 | 异<br>辛<br>烷                |        |        |   |             |                  |        |             |             |                  |                  |                            |                       |                  |                  |        |        |             |             |        |             |             |        |             |             |                  |                  |        |                  |    |             | 异<br>辛<br>烷                |
| 23 | 戊<br>烷                     |        |        |   |             |                  |        |             |             |                  |                  |                            |                       |                  |                  |        |        |             |             |        |             |             |        |             |             |                  |                  |        |                  |    |             | 戊<br>烷                     |
| 24 | 异<br>丙<br>醇                |        |        |   |             |                  |        |             |             |                  |                  |                            |                       |                  |                  |        |        |             |             |        |             |             |        |             |             |                  |                  |        |                  |    |             | 异<br>丙<br>醇                |
| 25 | 二<br>丙<br>醚                |        |        |   |             |                  |        |             |             |                  |                  |                            |                       |                  |                  |        |        |             |             |        |             |             |        |             |             |                  |                  |        |                  |    |             | 二<br>丙<br>醚                |
| 26 | 四<br>氯<br>乙<br>烷           |        |        |   |             |                  |        |             |             |                  |                  |                            |                       |                  |                  |        |        |             |             |        |             |             |        |             |             |                  |                  |        |                  |    |             | 四<br>氯<br>乙<br>烷           |
| 27 | 四<br>氢<br>呋<br>喃           |        |        |   |             |                  |        |             |             |                  |                  |                            |                       |                  |                  |        |        |             |             |        |             |             |        |             |             |                  |                  |        |                  |    |             | 四<br>氢<br>呋<br>喃           |
| 28 | 甲<br>苯                     |        |        |   |             |                  |        |             |             |                  |                  |                            |                       |                  |                  |        |        |             |             |        |             |             |        |             |             |                  |                  |        |                  |    |             | 甲<br>苯                     |
| 29 | 三<br>氯<br>乙<br>烷           |        |        |   |             |                  |        |             |             |                  |                  |                            |                       |                  |                  |        |        |             |             |        |             |             |        |             |             |                  |                  |        |                  |    |             | 三<br>氯<br>乙<br>烷           |
| 30 | 水                          |        |        |   |             |                  |        |             |             |                  |                  |                            |                       |                  |                  |        |        |             |             |        |             |             |        |             |             |                  |                  |        |                  |    |             | 水                          |
| 31 | 二<br>甲<br>苯                |        |        |   |             |                  |        |             |             |                  |                  |                            |                       |                  |                  |        |        |             |             |        |             |             |        |             |             |                  |                  |        |                  |    |             | 二<br>甲<br>苯                |

不互溶

可互溶

■ 不互溶 □ 可互溶

### 乙腈 (ACN)、甲醇 (MeOH) 和四氢呋喃 (THF) 的溶剂强度对比



常用溶剂的性质

| 溶剂       | 截止波长(nm) <sup>a</sup> | 折射率RI <sup>b</sup> | 黏度(cP) | 沸点(°C) <sup>c</sup> | ε (silica) <sup>d</sup> |
|----------|-----------------------|--------------------|--------|---------------------|-------------------------|
| 丙酮       | 330                   | 1.359              | 0.36   | 56                  | 0.53                    |
| 乙腈       | 190                   | 1.344              | 0.38   | 82                  | 0.52                    |
| 正丁醇      | 215                   | 1.399              | 2.98   | 118                 | 0.40                    |
| 1-氯甲醇    | 220                   | 1.402              | 0.45   | 78                  | 0.20                    |
| 氯仿       | 245                   | 1.446              | 0.57   | 61                  | 0.26                    |
| 环己烷      | 200                   | 1.424              | 1.00   | 81                  | 0.00                    |
| 二甲基甲酰胺   | 268                   | 1.430              | 0.92   | 153                 |                         |
| 二甲基亚砜    | 268                   | 1.478              | 224    | 189                 | 0.50                    |
| 1,4-二氧六环 | 215                   | 1.422              | 1.37   | 101                 | 0.51                    |
| 乙酸乙酯     | 256                   | 1.372              | 0.45   | 77                  | 0.48                    |
| 庚烷       | 200                   | 1.388              | 0.40   | 98                  | 0.00                    |
| 正己烷      | 195                   | 1.375              | 0.31   | 69                  | 0.00                    |
| 异辛烷      | 215                   | 1.391              | 0.50   | 99                  | 0.00                    |
| 甲醇       | 205                   | 1.328              | 0.55   | 65                  | 0.70                    |
| 甲基叔丁基醚   | 210                   | 1.369              | 0.27   | 55                  | 0.48                    |
| 甲基乙基酮    | 329                   | 1.379              | 0.43   | 80                  | 0.40                    |
| 二氯甲烷     | 233                   | 1.424              | 0.44   | 40                  | 0.30                    |
| 异丙醇      | 205                   | 1.377              | 2.40   | 82                  | 0.60                    |
| 正丙醇      | 210                   | 1.386              | 2.30   | 97                  | 0.60                    |
| 四氢呋喃     | 212                   | 1.407              | 0.55   | 66                  | 0.53                    |
| 甲苯       | 284                   | 1.497              | 0.59   | 111                 | 0.22                    |
| 水        | 190                   | 1.333              | 1.00   | 100                 |                         |

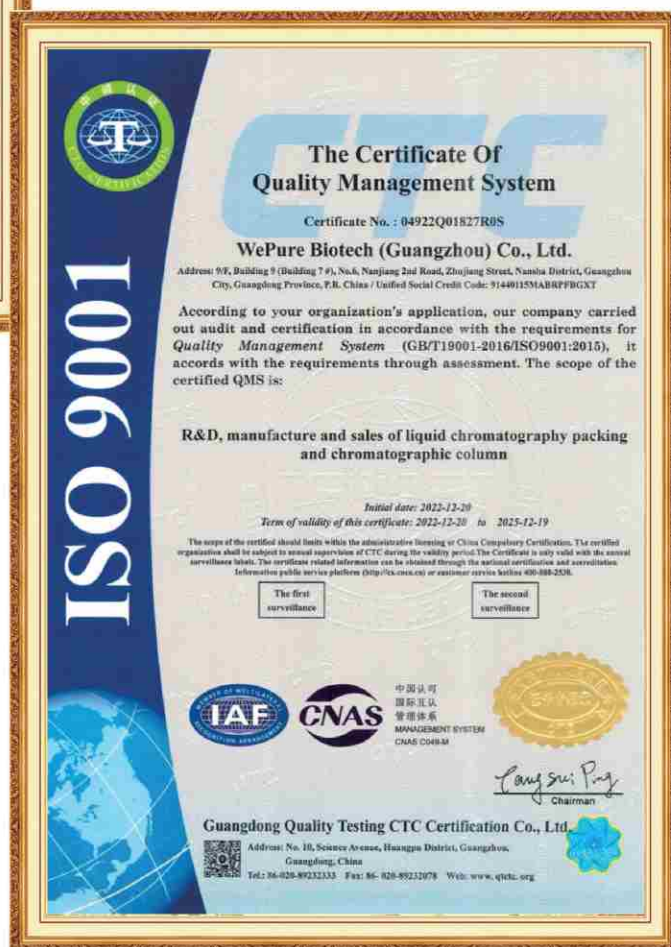
a 溶剂吸收值为 1.0Au, 10mm 检测池的波长

b 折射率

c 沸点

d 溶剂强度参数

## 微纯生物科技ISO 9001证书





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