

# Alltech® Alltima™ Introduction



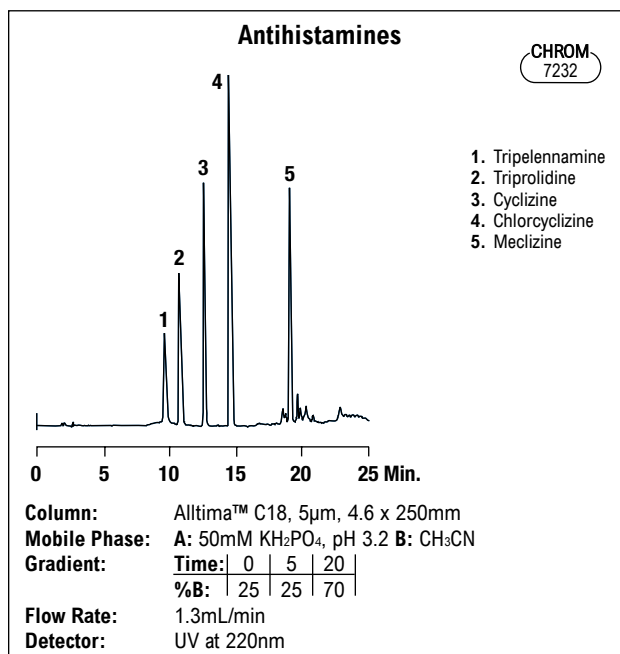
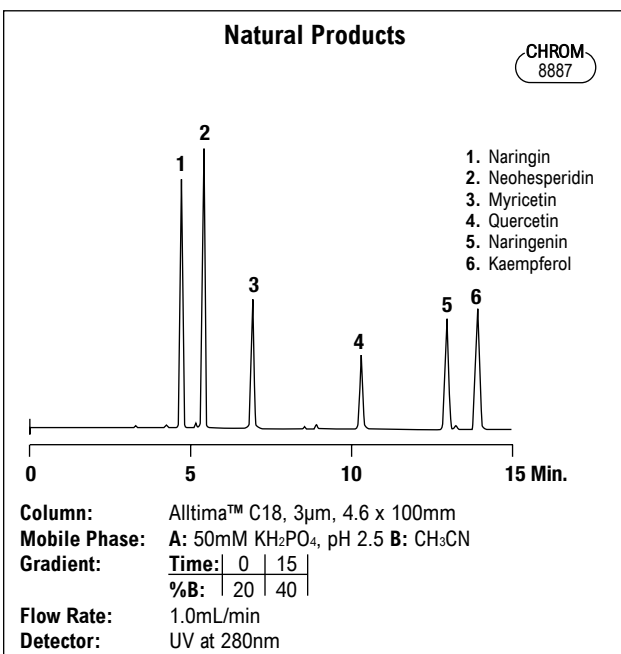
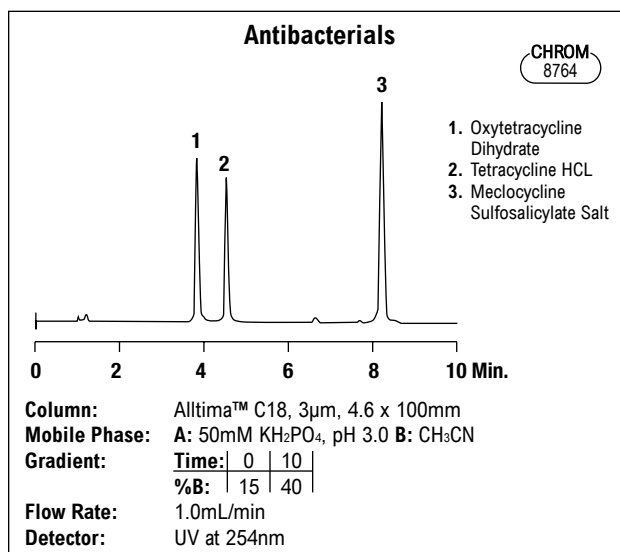
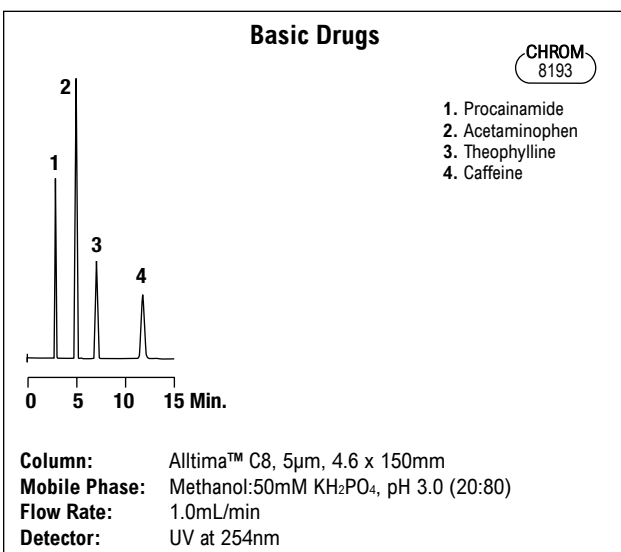
## High-Quality General-Purpose HPLC Columns

- Extensive collection of published applications
- Well suited for microbore applications, stable in popular microbore mobile phases
- Acid and base deactivated symmetrical peaks
- Polymerically bonded and double-encapped for long column lifetimes
- Analyze acids, bases, and neutrals in one run
- Full range of column dimensions, from microbore to preparative

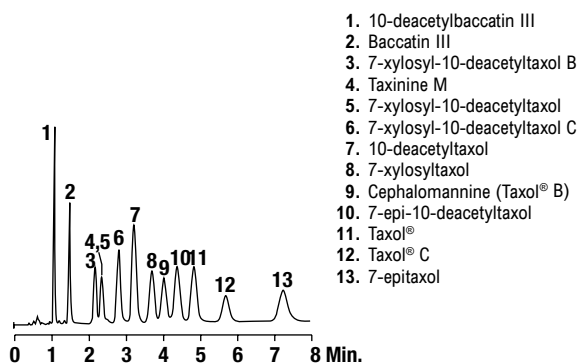
Alltech



Alltima™ Phase Specifications									
Phase	Base Material	Particle Shape	Particle Size	Pore Size	Surface Area	Carbon Load	Phase Type	Endcapped?	USP L-code
C18	Silica	Spherical	3, 5, 10µm	100Å	340m <sup>2</sup> /g	16%	Polymeric	Yes	L1
C18 LL	Silica	Spherical	5µm	100Å	340m <sup>2</sup> /g	9%	Polymeric	Yes	L1
C8	Silica	Spherical	3, 5, 10µm	100Å	340m <sup>2</sup> /g	9%	Polymeric	Yes	L7
Phenyl	Silica	Spherical	3, 5µm	100Å	340m <sup>2</sup> /g	7.5%	Polymeric	Yes	L11
Cyano	Silica	Spherical	3, 5µm	100Å	340m <sup>2</sup> /g	—	Polymeric	Yes	L10
Amino (NH <sub>2</sub> )	Silica	Spherical	3, 5µm	100Å	340m <sup>2</sup> /g	—	Polymeric	No	L8
Silica	Silica	Spherical	3, 5, 10µm	100Å	340m <sup>2</sup> /g	—	—	—	L3



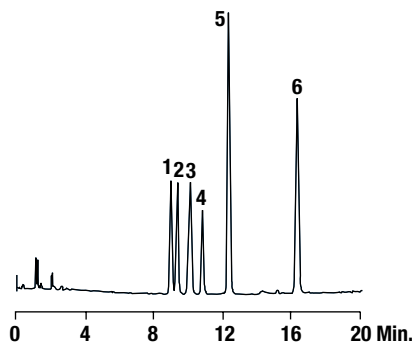
## Alltech® Alltima™ Reversed-Phase Columns

Taxol® and Related Taxanes in Yew  
(taxus brevifolia)CHROM  
9221

**Column:** Alltima™ Phenyl Rocket™, 3µm, 7 x 53mm  
**Mobile Phase:** 0.05% TFA in H<sub>2</sub>O:MeOH:CH<sub>3</sub>CN (50:19:31)  
**Flow Rate:** 2.5mL/min  
**Detector:** UV at 230nm

1. 10-deacetylbaccatin III
2. Baccatin III
3. 7-xylosyl-10-deacetyltaxol B
4. Taxinine M
5. 7-xylosyl-10-deacetyltaxol
6. 7-xylosyl-10-deacetyltaxol C
7. 10-deacetyltaxol
8. 7-xylosyltaxol
9. Cephalomannine (Taxol® B)
10. 7-epi-10-deacetyltaxol
11. Taxol®
12. Taxol® C
13. 7-epitaxol

## Anticonvulsants

CHROM  
7233

**Column:** Alltima™ Phenyl, 5µm, 4.6 x 250mm  
**Mobile Phase:** A: H<sub>2</sub>O B: CH<sub>3</sub>CN  
**Gradient:** Time: 0 | 20 | 25 | 30  
 %B: 15 | 60 | 60 | 15  
**Flow Rate:** 1.5mL/min  
**Detector:** UV at 254nm

1. Ethotoin
2. Phenobarbital
3. Methsuximide
4. Mephentyoin
5. Carbamazepine
6. Diazepam

## Alltima™ All-Guard™ Cartridges\*

Packing	i.d. x Length	Qty.	Part No.
C18, 5µm	2.1 x 7.5mm	3	96680
	3.0 x 7.5mm	3	96361
	4.6 x 7.5mm	3	96080
C18-LL, 5µm	2.1 x 7.5mm	3	96432
	4.6 x 7.5mm	3	96285
C8, 5µm	2.1 x 7.5mm	3	96441
	3.0 x 7.5mm	3	96362
	4.6 x 7.5mm	3	96081
Phenyl, 5µm	2.1 x 7.5mm	3	96442
	4.6 x 7.5mm	3	96082
All-Guard™ Cartridge Holder (Includes Direct-Connect Column Coupler)		ea	80101

\*All-Guard™ holder required. Other particle sizes available.

## Alltima™ HPLC Reversed-Phase Columns

Packing	Format	i.d. x Length	Standard Part No.	Waters® Fittings Part No.
C18, 3µm	Microbore	1.0 x 100mm	43853	—
	Microbore	1.0 x 150mm	43864	—
	Expedite™ MS	2.1 x 20mm	43803	—
	Microbore	2.1 x 50mm	43849	—
	Microbore	2.1 x 100mm	43821	—
	Microbore	2.1 x 150mm	43852	—
	Solvent Reducer	3.0 x 150mm	81143	—
	Expedite™ MS	4.6 x 20mm	43851	—
	Analytical	4.6 x 50mm	81412	—
	Analytical	4.6 x 100mm	81382	81383
C18, 5µm	Analytical	4.6 x 150mm	81387	81388
	Rocket™	7 x 33mm	50603	—
	Rocket™	7 x 53mm	50605	—
	Microbore	1.0 x 150mm	88384	—
	Microbore	1.0 x 250mm	88385	—
	Microbore	2.1 x 150mm	88370	—
	Microbore	2.1 x 250mm	88371	—
	Solvent Reducer	3.0 x 150mm	81140	—
	Solvent Reducer	3.0 x 250mm	81142	—
	Analytical	4.6 x 150mm	88052	88053
C18, 10µm	Analytical	4.6 x 250mm	88056	88057
	Analytical	4.6 x 250mm	88307	88308
C18-LL, 5µm	Microbore	1.0 x 150mm	88390	—
	Microbore	1.0 x 250mm	88391	—
	Microbore	2.1 x 150mm	88388	—
	Microbore	2.1 x 250mm	88389	—
	Analytical	4.6 x 150mm	88069	—
	Analytical	4.6 x 250mm	88099	—
C8, 3µm	Analytical	4.6 x 50mm	81413	—
	Analytical	4.6 x 100mm	81392	81393
	Analytical	4.6 x 150mm	81397	81398
	Rocket™	7 x 53mm	50609	—
C8, 5µm	Microbore	1.0 x 150mm	88394	—
	Microbore	1.0 x 250mm	88395	—
	Microbore	2.1 x 150mm	88372	—
	Microbore	2.1 x 250mm	88373	—
	Solvent Reducer	3.0 x 150mm	81146	—
	Analytical	4.6 x 150mm	88072	88073
C8, 10µm	Analytical	4.6 x 250mm	88076	88077
	Analytical	4.6 x 250mm	88317	88318
Phenyl, 3µm	Microbore	1.0 x 100mm	43892	—
	Microbore	1.0 x 150mm	43854	—
	Microbore	2.1 x 150mm	43813	—
Phenyl, 5µm	Analytical	4.6 x 50mm	81178	—
	Analytical	4.6 x 100mm	81181	88184
	Analytical	4.6 x 150mm	81188	81191
Phenyl, 5µm	Solvent Reducer	3.0 x 150mm	81147	—
	Analytical	4.6 x 150mm	88087	88088
	Analytical	4.6 x 250mm	88092	88093

# Alltech® Alltima™ C18 Validation Kits

Alltima™ columns have the batch-to-batch and column-to-column reproducibility required for method development. Each kit includes three columns made from three different batches of Alltima™ C18.

### Alltima™ C18 Validation Kits

Description	Includes:	i.d. x Length	Part No.
C18, 3µm	3 columns from 3 different batches	4.6 x 100mm	11350
C18, 5µm	3 columns from 3 different batches	4.6 x 150mm	11541
C18, 5µm	3 columns from 3 different batches	4.6 x 250mm	11543

# Alltech® Alltima™ Normal-Phase Columns

### Alltima™ HPLC Normal-Phase Columns

Packing	Format	i.d. x Length	Standard Part No.	Waters® Fittings Part No.
Cyano, 3µm	Analytical	4.6 x 50mm	81179	—
	Analytical	4.6 x 100mm	81182	—
	Analytical	4.6 x 150mm	81189	81192
Cyano, 5µm	Analytical	4.6 x 150mm	88180	88182
	Analytical	4.6 x 250mm	88189	88191
Amino, 3µm	Analytical	4.6 x 50mm	81180	—
	Analytical	4.6 x 100mm	81183	—
	Analytical	4.6 x 150mm	81190	—
Amino, 5µm	Analytical	4.6 x 150mm	88205	—
	Analytical	4.6 x 250mm	88217	88218
Silica, 3µm	Microbore	1.0 x 100mm	43824	—
	Microbore	1.0 x 150mm	43855	—
	Microbore	2.1 x 150mm	43884	—
	Analytical	4.6 x 50mm	81414	—
	Analytical	4.6 x 100mm	81404	81405
Silica, 5µm	Analytical	4.6 x 150mm	81409	81410
	Analytical	4.6 x 250mm	88123	88124
Silica, 10µm	Analytical	4.6 x 250mm	88327	—

### Alltima™ All-Guard™ Cartridges\*

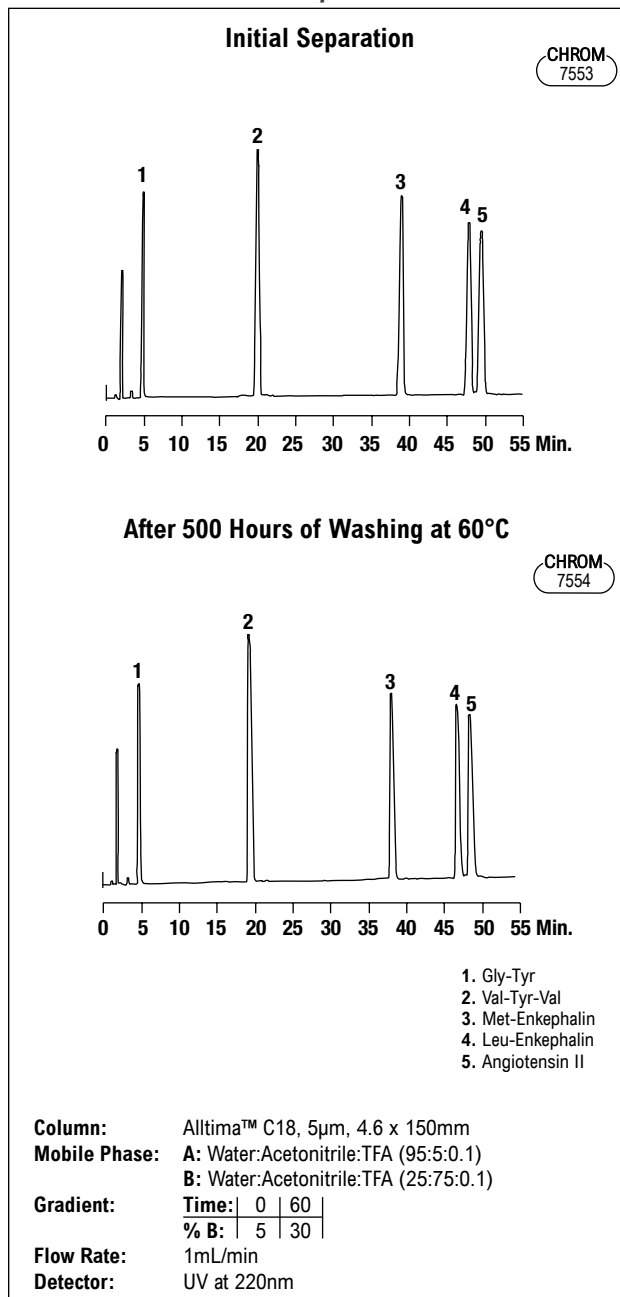
Packing	i.d. x Length	Qty.	Part No.
Cyano, 5µm	4.6 x 7.5mm	3	96084
Amino, 5µm	4.6 x 7.5mm	3	96085
Silica, 5µm	2.1 x 7.5mm	3	96450
	4.6 x 7.5mm	3	96083

All-Guard™ Cartridge Holder

(Includes Direct-Connect Column Coupler)

\*All-Guard™ holder required. Other particle sizes available.

### Alltima™ is Stable and Reproducible



Column capacity and selectivity remained constant after washing an Alltima™ C18 column for 500 hours with 0.5% TFA:Acetonitrile (50:50) at 60°C.

### tech tip

Want high throughput on a conventional (non-ultra high-pressure) system?

Choose the Rocket™ column format—no modifications necessary to your existing HPLC system. Choose Expedite™ columns for low volume and microbore systems. See page 31 for more explanation of the Rocket™ and Expedite™ formats.

# Alltech® Prep Columns

- Packed with identical media to analytical columns
- Additional dimensions may be custom ordered

## Econosphere™ Columns

Packing	Format	i.d. x Length	Part No.
C18, 10µm	Prep—Threaded	10 x 100mm	<b>28157</b>
	Prep—Threaded	10 x 250mm	<b>28085</b>
	Prep—Threaded	22 x 250mm	<b>28001</b>
C8, 10µm	Prep—Threaded	10 x 100mm	<b>28159</b>
	Prep—Threaded	10 x 250mm	<b>28087</b>
	Prep—Threaded	22 x 250mm	<b>28003</b>
Silica, 10µm	Prep—Threaded	10 x 100mm	<b>28167</b>
	Prep—Threaded	10 x 250mm	<b>28095</b>
	Prep—Threaded	22 x 250mm	<b>28057</b>

## Macrosphere™ Columns

Packing	Format	i.d. x Length	Part No.
GPC 60Å	Prep—Threaded	7.5 x 300mm	<b>88175</b>
GPC 100Å	Prep—Threaded	7.5 x 300mm	<b>88177</b>
GPC 150Å	Prep—Threaded	7.5 x 300mm	<b>88179</b>
GPC 300Å	Prep—Threaded	7.5 x 300mm	<b>88181</b>

## Alltima™ Columns

Packing	Format	i.d. x Length	Part No.
C18, 5µm	Prep—Threaded	10 x 150mm	<b>81102</b>
	Prep—Threaded	10 x 250mm	<b>88063</b>
	Prep—Threaded	22 x 150mm	<b>81106</b>
	Prep—Threaded	22 x 250mm	<b>81105</b>
C18, 10µm	Prep—Threaded	10 x 150mm	<b>81107</b>
	Prep—Threaded	10 x 250mm	<b>88334</b>
	Prep—Threaded	22 x 150mm	<b>81108</b>
	Prep—Threaded	22 x 250mm	<b>88335</b>
C8, 5µm	Prep—Threaded	10 x 150mm	<b>81109</b>
	Prep—Threaded	10 x 250mm	<b>88081</b>
	Prep—Threaded	22 x 150mm	<b>81112</b>
C8, 10µm	Prep—Threaded	22 x 250mm	<b>81110</b>
	Prep—Threaded	10 x 150mm	<b>81114</b>
	Prep—Threaded	10 x 250mm	<b>88336</b>
Silica, 5µm	Prep—Threaded	22 x 150mm	<b>81115</b>
	Prep—Threaded	22 x 250mm	<b>88337</b>
	Prep—Threaded	10 x 150mm	<b>81117</b>
	Prep—Threaded	10 x 250mm	<b>81116</b>
Silica, 10µm	Prep—Threaded	22 x 150mm	<b>81119</b>
	Prep—Threaded	22 x 250mm	<b>81118</b>
	Prep—Threaded	10 x 150mm	<b>81121</b>
	Prep—Threaded	10 x 250mm	<b>88338</b>
Silica, 10µm	Prep—Threaded	10 x 250mm	<b>88338</b>
	Prep—Threaded	22 x 150mm	<b>81125</b>
	Prep—Threaded	22 x 250mm	<b>88339</b>

## Platinum™ Columns

Packing	Format	i.d. x Length	Part No.
EPS C18, 5µm	Prep—Threaded	10 x 150mm	<b>82083</b>
	Prep—Threaded	22 x 150mm	<b>82093</b>
	Prep—Threaded	22 x 250mm	<b>82095</b>

## Prosphere™ HP

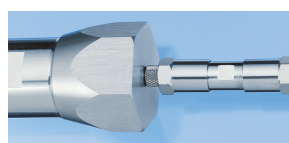
Packing	Format	i.d. x Length	Part No.
C18-AQ, 5µm	Prep—Threaded	10 x 100mm	<b>35572</b>
	Prep—Threaded	22 x 100mm	<b>35573</b>

## Apollo™ Columns

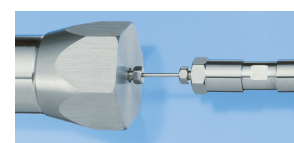
Packing	Format	i.d. x Length	Part No.
C18, 5µm	Prep—Threaded	7 x 150mm	<b>36530</b>
	Prep—Threaded	10 x 150mm	<b>36531</b>
	Prep—Threaded	10 x 250mm	<b>36543</b>
	Prep—Threaded	22 x 150mm	<b>36526</b>
	Prep—Threaded	22 x 250mm	<b>36537</b>
C8, 5µm	Prep—Threaded	7 x 150mm	<b>36546</b>
	Prep—Threaded	10 x 150mm	<b>36548</b>
	Prep—Threaded	10 x 250mm	<b>36549</b>
	Prep—Threaded	22 x 150mm	<b>36550</b>
	Prep—Threaded	22 x 250mm	<b>36551</b>
Phenyl, 5µm	Prep—Threaded	7 x 150mm	<b>36525</b>
	Prep—Threaded	10 x 150mm	<b>36527</b>
	Prep—Threaded	10 x 250mm	<b>36532</b>
	Prep—Threaded	22 x 150mm	<b>36535</b>
	Prep—Threaded	22 x 250mm	<b>36528</b>
Silica, 5µm	Prep—Threaded	7 x 150mm	<b>36542</b>
	Prep—Threaded	10 x 150mm	<b>36533</b>
	Prep—Threaded	10 x 250mm	<b>36540</b>
	Prep—Threaded	22 x 150mm	<b>36534</b>
	Prep—Threaded	22 x 250mm	<b>36524</b>

## Prevail™ Columns

Packing	Format	i.d. x Length	Part No.
Carbohydrate ES, 5µm	Prep—Threaded	10 x 250mm	<b>35115</b>
	Prep—Threaded	20 x 300mm	<b>35215</b>
C18, 5µm	Prep—Threaded	10 x 150mm	<b>99293</b>
	Prep—Threaded	10 x 250mm	<b>99294</b>
	Prep—Threaded	22 x 150mm	<b>99296</b>
	Prep—Threaded	22 x 250mm	<b>99297</b>



Connect with Direct-Connect™ Coupler.



Connect In-Line with Fittings and Tubing.

## Prep-Guard™ Accessories

Description	Part No.
Direct-Connect™ Column Coupler	<b>28195</b>
In-Line Connector	<b>9549</b>

## Alltech® Prep Guards™

Packing	Format	i.d. x Length	Part No.
<i>Econosphere™ Guards</i>			
C18, 10µm	Prep—Guard™	7 x 33mm	<b>970209</b>
Silica, 10µm	Prep—Guard™	7 x 33mm	<b>970210</b>
<i>Alltima™ Guards</i>			
C18, 10µm	Prep—Guard™	7 x 33mm	<b>970203</b>
C8, 10µm	Prep—Guard™	7 x 33mm	<b>970227</b>
Silica, 10µm	Prep—Guard™	7 x 33mm	<b>970204</b>
<i>Platinum™ Guard</i>			
EPS C18, 5µm	Prep—Guard™	7 x 33mm	<b>970216</b>
<i>Apollo™ Guards</i>			
C18, 5µm	Prep—Guard™	7 x 33mm	<b>970205</b>
C8, 5µm	Prep—Guard™	7 x 33mm	<b>96463</b>
Phenyl, 5µm	Prep—Guard™	7 x 33mm	<b>96430</b>
Silica, 5µm	Prep—Guard™	7 x 33mm	<b>970206</b>
<i>Prevail™ Guards</i>			
C18, 5µm	Prep—Guard™	7 x 33mm	<b>970211</b>

## related products

Please refer to pages 44–49, 54–57, and 96–97 for more information on media characteristics and analytical column offerings.

