

Alltech® Alltima™ Introduction

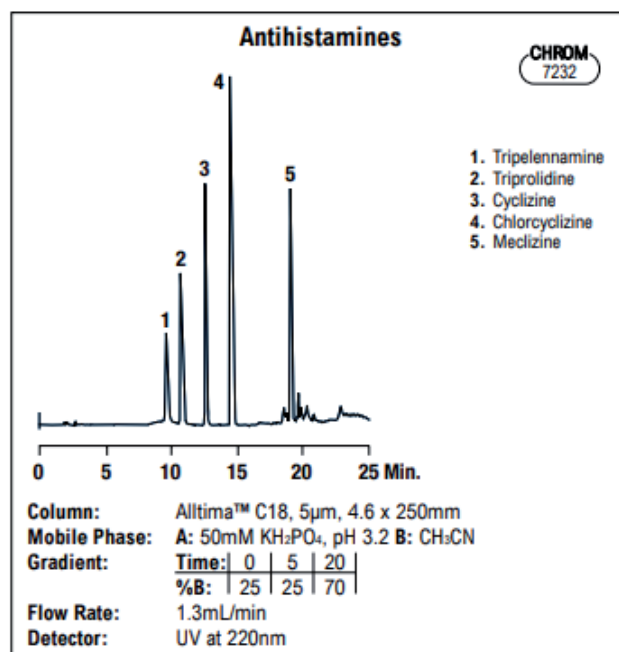
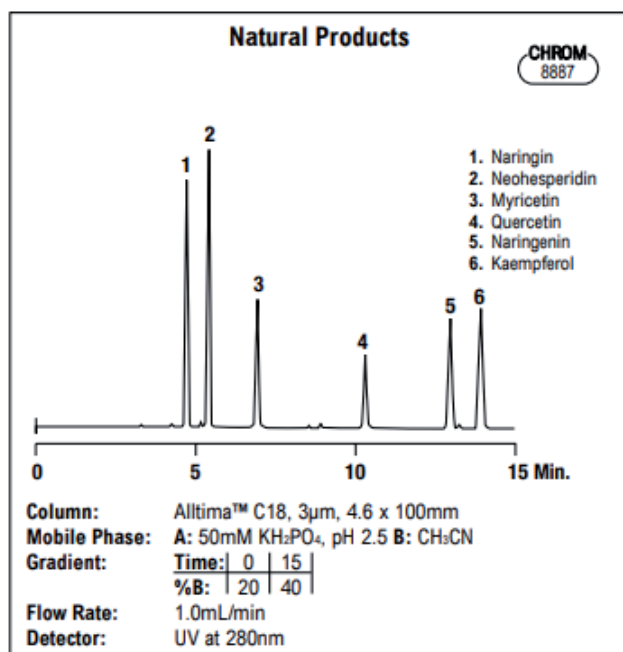
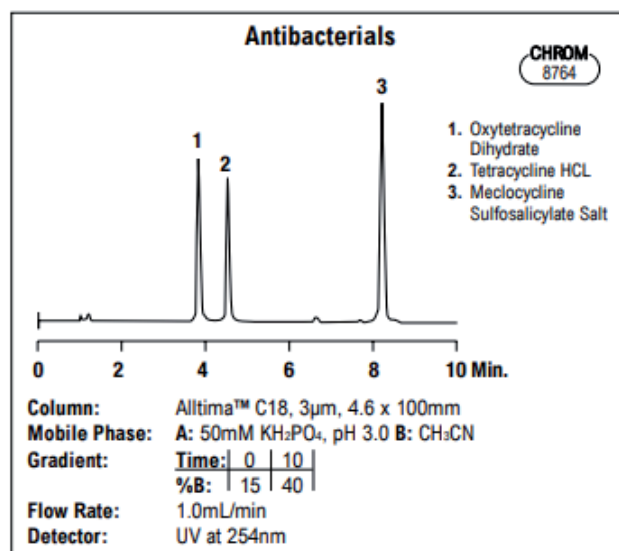
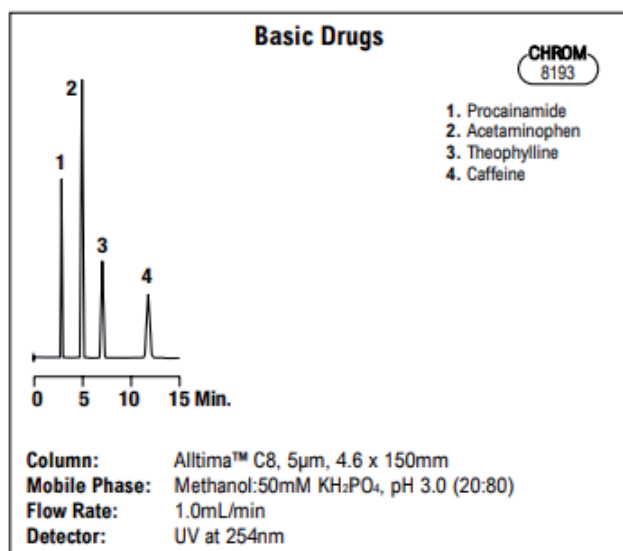


High-Quality General-Purpose HPLC Columns

- 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



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 ² /g	16%	Polymeric	Yes	L1
C18 LL	Silica	Spherical	5µm	100Å	340m ² /g	9%	Polymeric	Yes	L1
C8	Silica	Spherical	3, 5, 10µm	100Å	340m ² /g	9%	Polymeric	Yes	L7
Phenyl	Silica	Spherical	3, 5µm	100Å	340m ² /g	7.5%	Polymeric	Yes	L11
Cyano	Silica	Spherical	3, 5µm	100Å	340m ² /g	—	Polymeric	Yes	L10
Amino (NH ₂)	Silica	Spherical	3, 5µm	100Å	340m ² /g	—	Polymeric	No	L8
Silica	Silica	Spherical	3, 5, 10µm	100Å	340m ² /g	—	—	—	L3



Alltech® Alltima™ Introduction

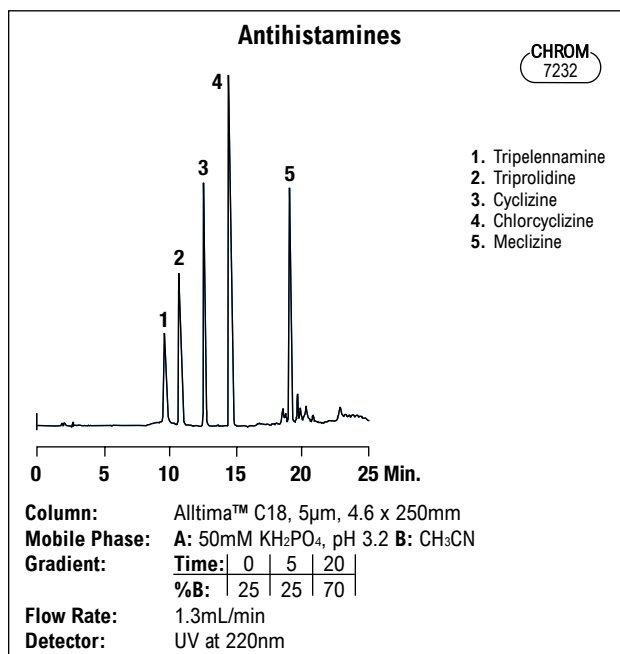
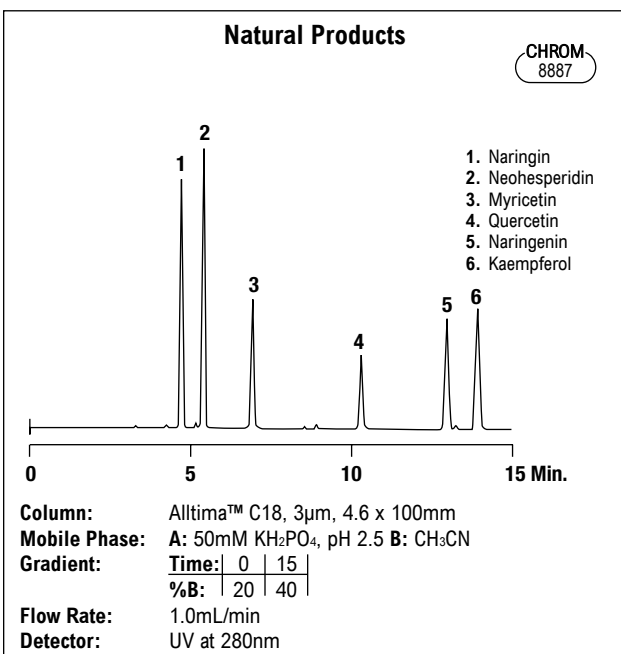
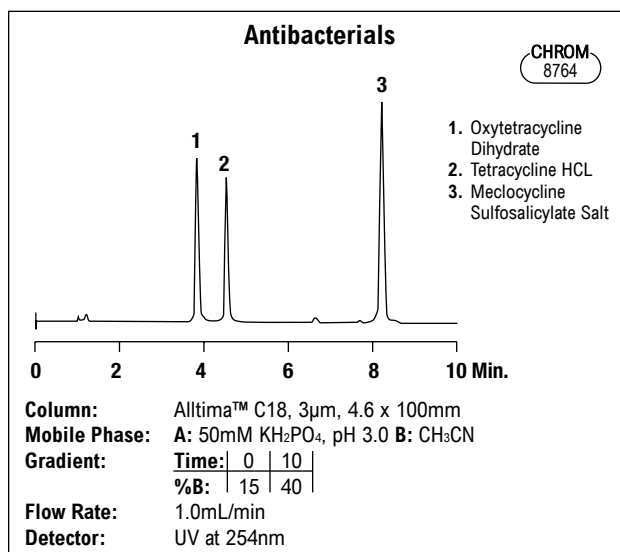
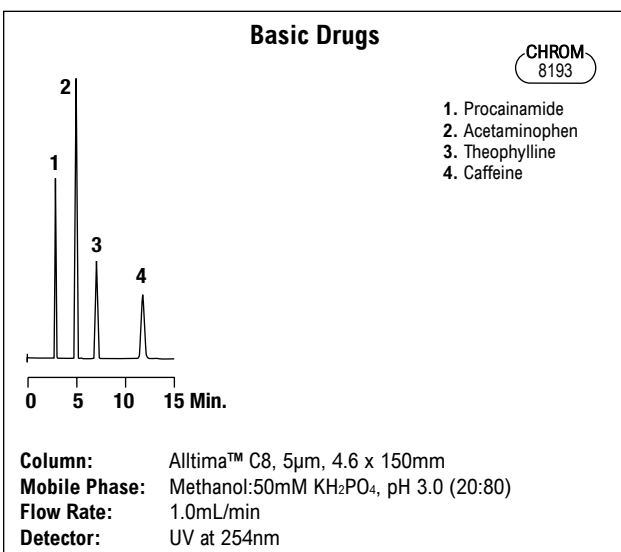


High-Quality General-Purpose HPLC Columns

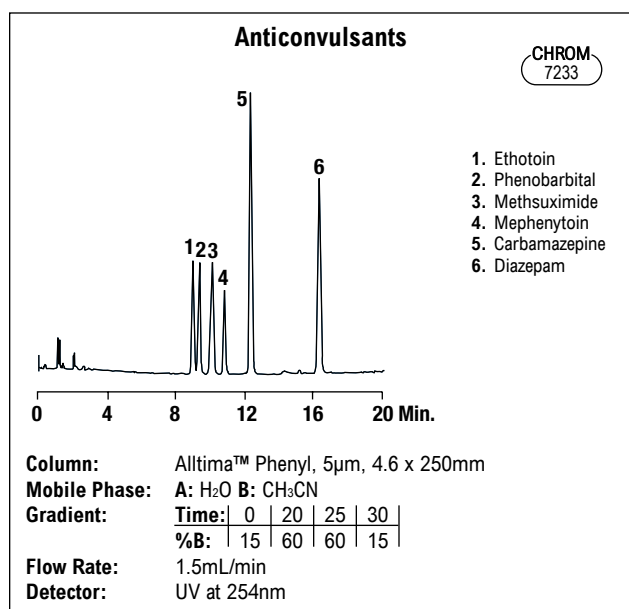
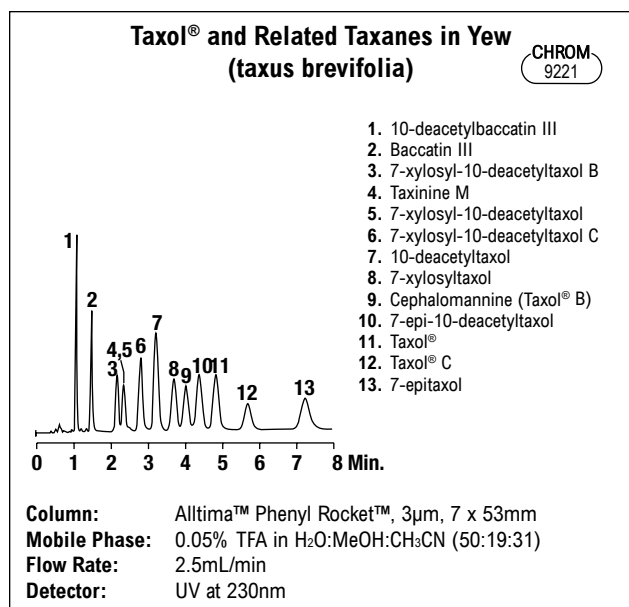
- Extensive collection of published applications
- Well suited for microbore applications, stable in popular microbore mobile phases
- Acid and base deactivated symmetrical peaks
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- Analyze acids, bases, and neutrals in one run
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Alltima™ 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 ² /g	16%	Polymeric	Yes	L1
C18 LL	Silica	Spherical	5µm	100Å	340m ² /g	9%	Polymeric	Yes	L1
C8	Silica	Spherical	3, 5, 10µm	100Å	340m ² /g	9%	Polymeric	Yes	L7
Phenyl	Silica	Spherical	3, 5µm	100Å	340m ² /g	7.5%	Polymeric	Yes	L11
Cyano	Silica	Spherical	3, 5µm	100Å	340m ² /g	—	Polymeric	Yes	L10
Amino (NH ₂)	Silica	Spherical	3, 5µm	100Å	340m ² /g	—	Polymeric	No	L8
Silica	Silica	Spherical	3, 5, 10µm	100Å	340m ² /g	—	—	—	L3



Alltech® Alltima™ Reversed-Phase Columns



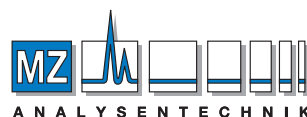
Alltima™ All-Guard™ Cartridges*

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	
	Analytical	4.6 x 150mm	81387	81388	
	Rocket™	7 x 33mm	50603	—	
	Rocket™	7 x 53mm	50605	—	
C18, 5µm	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	
	Analytical	4.6 x 250mm	88056	88057	
	C18, 10µm	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	
Analytical	4.6 x 250mm	88076	88077		
C8, 10µm	Analytical	4.6 x 250mm	88317	88318	
	Phenyl, 3µm	Microbore	1.0 x 100mm	43892	—
Phenyl, 3µm	Microbore	1.0 x 150mm	43854	—	
	Microbore	2.1 x 150mm	43813	—	
	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	



AUTHORIZED DISTRIBUTOR

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hplc columns | small molecule

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	88171	88172
	Analytical	4.6 x 250mm	88327	—

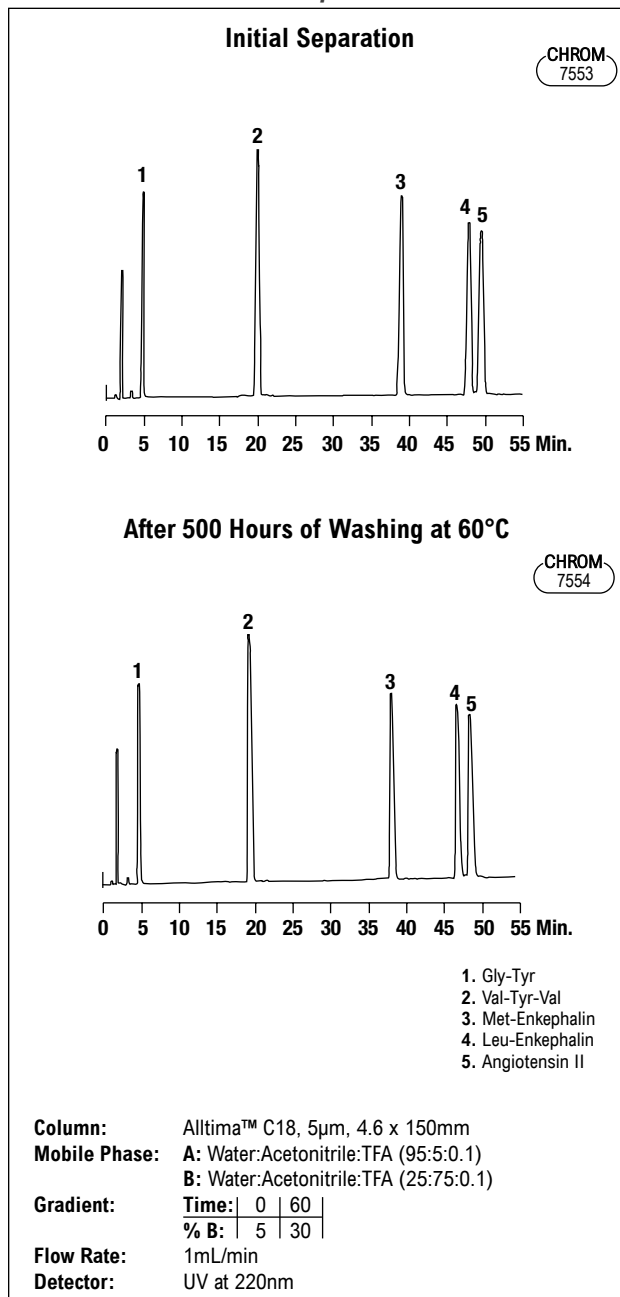
Alltima™ All-Guard™ Cartridges*

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)

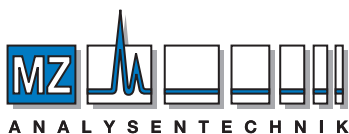
*All-Guard™ holder required. Other particle sizes available.

Alltima™ is Stable and Reproducible



Column: Alltima™ C18, 5µm, 4.6 x 150mm
Mobile Phase: A: Water:Acetonitrile:TFA (95:5:0.1)
 B: Water:Acetonitrile:TFA (25:75:0.1)
Gradient: Time: 0 | 60 |
 % B: 5 | 30 |
Flow Rate: 1mL/min
Detector: UV at 220nm

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.



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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	28157
	Prep—Threaded	10 x 250mm	28085
	Prep—Threaded	22 x 250mm	28001
C8, 10µm	Prep—Threaded	10 x 100mm	28159
	Prep—Threaded	10 x 250mm	28087
	Prep—Threaded	22 x 250mm	28003
Silica, 10µm	Prep—Threaded	10 x 100mm	28167
	Prep—Threaded	10 x 250mm	28095
	Prep—Threaded	22 x 250mm	28057

Macrosphere™ Columns

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

Alltima™ Columns

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

Platinum™ Columns

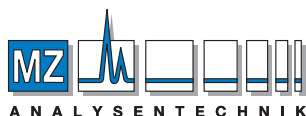
Packing	Format	i.d. x Length	Part No.
EPS C18, 5µm	Prep—Threaded	10 x 150mm	82083
	Prep—Threaded	22 x 150mm	82093
	Prep—Threaded	22 x 250mm	82095

Prosphere™ HP

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

related products

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



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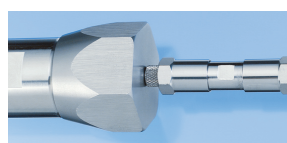
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Apollo™ Columns

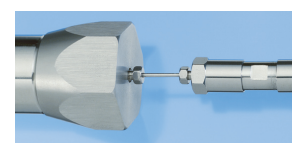
Packing	Format	i.d. x Length	Part No.
C18, 5µm	Prep—Threaded	7 x 150mm	36530
	Prep—Threaded	10 x 150mm	36531
	Prep—Threaded	10 x 250mm	36543
	Prep—Threaded	22 x 150mm	36526
	Prep—Threaded	22 x 250mm	36537
C8, 5µm	Prep—Threaded	7 x 150mm	36546
	Prep—Threaded	10 x 150mm	36548
	Prep—Threaded	10 x 250mm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

Prevail™ Columns

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



Connect with Direct-Connect™ Coupler.



Connect In-Line with Fittings and Tubing.

Prep-Guard™ Accessories

Description	Part No.
Direct-Connect™ Column Coupler	28195
In-Line Connector	9549

Alltech® Prep Guards™

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