

VertiSep™ AQS HPLC Columns

- Ultra-high purity spherical Silica offer excellent stability, efficiency and column-to-column reproducibility
- Stable and strong retention in 100% aqueous mobile phase for hydrophilic or polar compounds
- High carbon loading C18 offers high degree of hydrophobicity
- High surface area offers high resolution for gradient elution of difficult separation compounds
- Monomeric bonding offers low back pressure and high column efficiency to better resolve chemically similar analytes.



VertiSep™ AQS packings are ultra-high purity silica which contains less amounts of metal ions and sulfate contaminants offer excellent stability, efficiency, column-to-column reproducibility and long lifetime at high and low pH levels at pH 1.5-10.0* and ideal for LC/MS or ELSD application.

VertiSep™ AQS packings are polar-embed to eliminated detrimental effects of phase collapse. This offers stable and strong retention in 100% aqueous mobile phase for hydrophilic or polar compounds such as Biomolecules, Metabolites, Oligosaccharides, Amino acids, small Peptides, Nucleotides and Organic acids.

VertiSep™ AQS packings are high surface of 300m²/g offer high capacity and high resolution for fast gradient elution.

VertiSep™ AQS reverse phase C18 packings are high carbon loading of 15% offering the high degree of hydrophobicity.

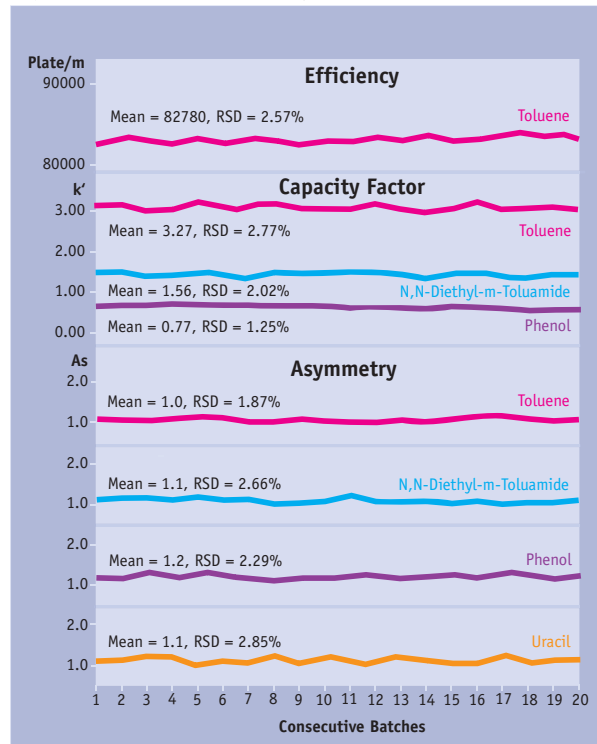
VertiSep™ AQS reverse phase C8 packings are fully endcapped and show selectivity as conventional C18 phases.

VertiSep™ AQS packings are monomeric bonding resulting in lower column back pressure and high column efficiency to better resolve chemically similar analytes.

VertiSep™ AQS are manufactured by statistic process control of Silica synthesis, bonding and column packing. The reproducible column packing method control provides exceptional efficiency, symmetry and reproducible capacity factor.

Specifications						
Packing	Particle Size (mm)	Carbon Load (%)	Pore Size (Å)	Pore Volume (mL/g)	Surface Area (m ² /g)	End Capped
C18	3,5,10	15	120	1.0	300	Yes
C8	3,5,10	8	120	1.0	300	Yes
Ph	3,5,10	7	120	1.0	300	Yes
CN	3,5,10	4	120	1.0	300	Yes
NH2	3,5,10	3	120	1.0	300	No
Si	3,5,10	-	120	1.0	300	No
Diol	3,5,10	-	120	1.0	300	No

Reproducible Column Packing Method Controls

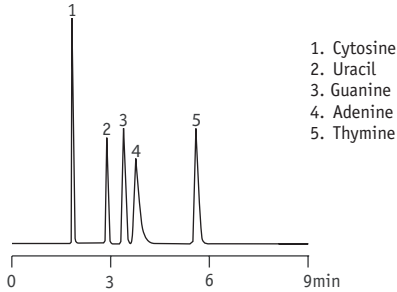


Test Conditions

Column: VertiSep™ AQS C18, 5µm, 4.6x250mm
 Mobile Phase: Acetonitrile/Water (60/40)
 Flow Rate: 1.0mL/min
 Detector: UV254nm
 Sample: Reversed phase test mix

*VertiSep™ AQS CN is stable at pH 1.5-7.0

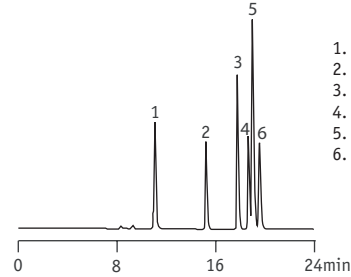
Nucleic acid Bases



1. Cytosine
2. Uracil
3. Guanine
4. Adenine
5. Thymine

Column: VertiSep™ AQS C18 5µm 4.6x150mm
 Mobile Phase: ACN:25nM KH₂PO₄, pH 3.0 (2:98)
 Flow Rate: 1.0mL/min
 Detection: UV254nm

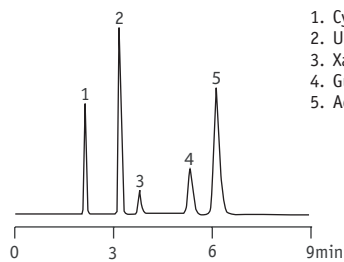
Polyphenolic Flavonoids



1. Myricetin
2. Quercetin
3. Naringenin
4. Hesperetin
5. Apigenin
6. Kaempferol

Column: VertiSep™ AQS C18 5µm 4.6x150mm
 Mobile Phase: A: 25nM KH₂PO₄, B: ACN
 Gradient: Time:%B: 0:20, 15:40, 25:40
 Flow Rate: 1mL/min
 Detection: UV280nm

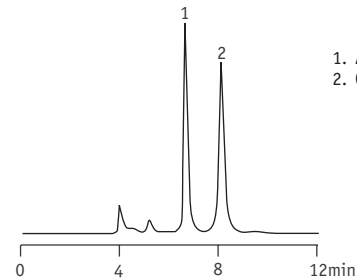
Nucleosides



1. Cytidine
2. Uridine
3. Xanthine
4. Guanosine
5. Adenosine

Column: VertiSep™ AQS C18 5µm 4.6x150mm
 Mobile Phase: ACN:25nM KH₂PO₄, pH 3.0 (4:96)
 Flow Rate: 1.0mL/min
 Detection: UV254nm

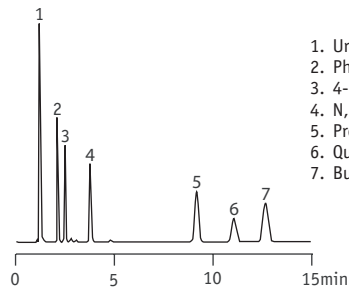
Antioxidants



1. Ascorbic acid
2. GSH

Column: VertiSep™ AQS C18 5µm 4.6x150mm
 Mobile Phase: 0.1M Phosphante, pH 3.1
 Flow Rate: 1.0mL/min
 Detection: ECD

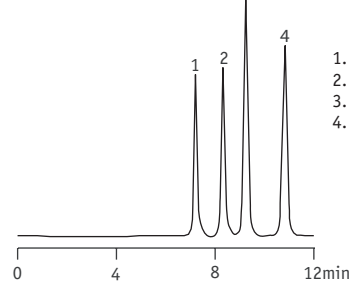
Acids, Bases & Neutrals Mix



1. Uracil
2. Phenol
3. 4-Phenylbutyric acid
4. N,N-Diethyl-m-toluamide
5. Propylbenzene
6. Quinizarin
7. Butylbenzene

Column: VertiSep™ AQS C18 5µm 4.6x150mm
 Mobile Phase: ACN:25nM KH₂PO₄, pH 2.5 (65:35)
 Flow Rate: 1.0mL/min
 Detection: UV254nm

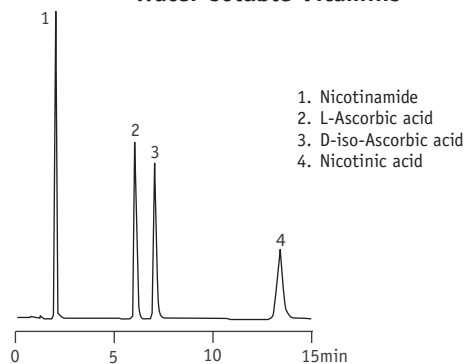
Ascorbic acid glycoside



1. AA-2G
2. ASA
3. AA-5G
4. AA-6G

Column: VertiSep™ AQS C18 5µm 4.6x150mm
 Mobile Phase: KH₂PO₄-H₃PO₄, pH 4.0
 Flow Rate: 0.7mL/min
 Detection: UV240nm

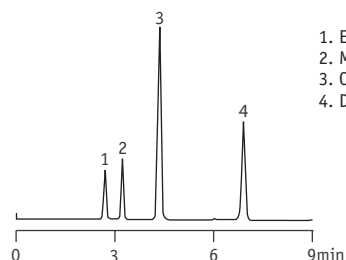
Water-soluble Vitamins



1. Nicotinamide
2. L-Ascorbic acid
3. D-iso-Ascorbic acid
4. Nicotinic acid

Column: VertiSep™ AQS C8 5µm 4.6x150mm
 Mobile Phase: CH₃CN:5nM Cetyltrimethylammonium Br⁺ + 50mM KH₂PO₄, pH4 by H₃PO₄ (5:95)
 Flow Rate: 1.0mL/min
 Detection: UV254nm

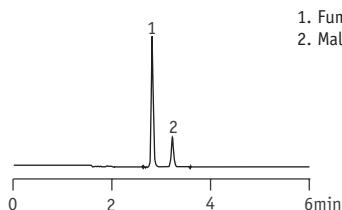
Anticonvulsants



1. Ethotoin
2. Mephenytoin
3. Carbamazepine
4. Diazepam

Column: VertiSep™ AQS Ph 5µm 4.6x150mm
 Mobile Phase: A: Water, B: ACN
 Gradient: Time:%B: 0:25, 15:60
 Flow Rate: 1.5mL/min
 Detection: UV254nm

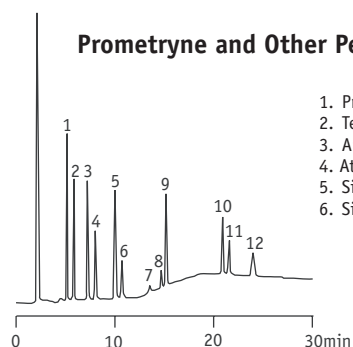
Maleic and Fumaric Acids



1. Fumaric acid
2. Maleic acid

Column: VertiSep™ AQS C18 5µm 4.6x250mm
 Mobile Phase: 50mM KH₂PO₄, pH 7.0
 Flow Rate: 1.0mL/min
 Detection: UV210nm

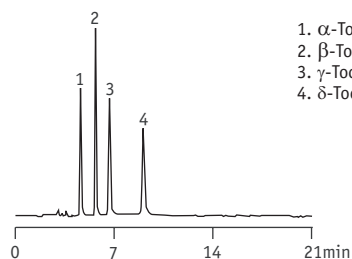
Prometryne and Other Pesticides



1. Prometryne
2. Terbutryne
3. Ametryne
4. Atrazine
5. Simetryne
6. Sinazine
7. Propoxur
8. Carbofuran
9. Carbaryl
10. Fenuron
11. Monuron
12. Methomyl

Column: VertiSep™ AQS C18 5µm 4.6x150mm
 Mobile Phase: A: n-Hexane, B: C₂H₅OH
 Gradient: Time:%B: 0:1, 6:2
 Flow Rate: 1.0mL/min
 Detection: UV230nm

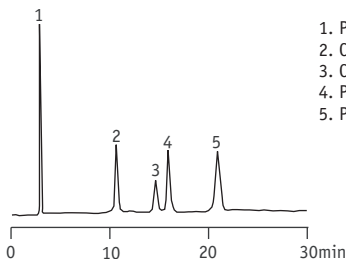
Tocopherol



1. α-Tocopherol
2. β-Tocopherol
3. γ-Tocopherol
4. δ-Tocopherol

Column: VertiSep™ AQS NH2 5µm 4.6x250mm
 Mobile Phase: Ethyl Acetate:Hexane (30:70)
 Flow Rate: 1.0mL/min
 Detection: UV290nm

Steroids



1. Progesterone
2. Corticosterone
3. Cortisone
4. Prednisone
5. Prednisolone

Column: VertiSep™ AQS Diol 5µm 4.6x150mm
 Mobile Phase: Hexane:Ethanol (85:15)
 Flow Rate: 1.0mL/min
 Detection: UV254nm

Ordering Information					
Phase	Particle Size (µm)	Formats	I.D. Length (mm)	QTY	Part No.
VertiSep™ AQS					
C18	3	Ultra-Fast	2.1 x 10	1	03DA-B111
	3	Ultra-Fast	2.1 x 20	1	03DA-B611
	3	Ultra-Fast	2.1 x 50	1	03DA-B211
	3	LC/MS	2.1 x 100	1	03DA-B311
	3	LC/MS	2.1 x 150	1	03DA-B411
	3	LC/MS	3.2 x 100	1	03DA-C311
	3	LC/MS	3.2 x 150	1	03DA-C411
	3	Hi-Speed	4.6 x 50	1	03DA-E211
	3	Analytical	4.6 x 100	1	03DA-E311
	3	Analytical	4.6 x 150	1	03DA-E411
	3	Hi-Speed	7.8 x 50	1	03DA-G211
	3	Analytical	7.8 x 100	1	03DA-G311
	5	LC/MS	2.1 x 100	1	03DA-B321
	5	LC/MS	2.1 x 150	1	03DA-B421
	5	LC/MS	3.2 x 100	1	03DA-C321
	5	LC/MS	3.2 x 150	1	03DA-C421
	5	LC/MS	3.2 x 250	1	03DA-C521
	5	Hi-Speed	4.6 x 50	1	03DA-E221
	5	Analytical	4.6 x 100	1	03DA-E321
	5	Analytical	4.6 x 150	1	03DA-E421
	5	Analytical	4.6 x 250	1	03DA-E521
	5	Prep	10.0 x 150	1	03DA-H421
	5	Prep	10.0 x 250	1	03DA-H521
	5	Prep	21.2 x 150	1	03DA-I421
	5	Prep	21.2 x 250	1	03DA-I521
	10	Analytical	4.6 x 250	1	03DA-E531
	10	Prep	10.0 x 150	1	03DA-H431
	10	Prep	10.0 x 250	1	03DA-H531
	10	Prep	21.2 x 150	1	03DA-I431
	10	Prep	21.2 x 250	1	03DA-I531
	10	Prep	30.0 x 150	1	03DA-J431
10	Prep	30.0 x 250	1	03DA-J531	
10	Prep	50.0 x 150	1	03DA-K431	
10	Prep	50.0 x 250	1	03DA-K531	

Ordering Information					
Phase	Particle Size (µm)	Formats	I.D. Length (mm)	QTY	Part No.
VertiSep™ AQS					
C8	3	Ultra-Fast	2.1 x 10	1	03DB-B111
	3	Ultra-Fast	2.1 x 20	1	03DB-B611
	3	Ultra-Fast	2.1 x 50	1	03DB-B211
	3	LC/MS	2.1 x 100	1	03DB-B311
	3	LC/MS	2.1 x 150	1	03DB-B411
	3	LC/MS	3.2 x 100	1	03DB-C311
	3	LC/MS	3.2 x 150	1	03DB-C411
	3	Hi-Speed	4.6 x 50	1	03DB-E211
	3	Analytical	4.6 x 100	1	03DB-E311
	3	Analytical	4.6 x 150	1	03DB-E411
	3	Hi-Speed	7.8 x 50	1	03DB-G211
	3	Analytical	7.8 x 100	1	03DB-G311
	5	LC/MS	2.1 x 100	1	03DB-B321
	5	LC/MS	2.1 x 150	1	03DB-B421
	5	LC/MS	3.2 x 100	1	03DB-C321
	5	LC/MS	3.2 x 150	1	03DB-C421
	5	LC/MS	3.2 x 250	1	03DB-C521
	5	Hi-Speed	4.6 x 50	1	03DB-E221
	5	Analytical	4.6 x 100	1	03DB-E321
	5	Analytical	4.6 x 150	1	03DB-E421
	5	Analytical	4.6 x 250	1	03DB-E521
	5	Prep	10.0 x 150	1	03DB-H421
	5	Prep	10.0 x 250	1	03DB-H521
	5	Prep	21.2 x 150	1	03DB-I421
	5	Prep	21.2 x 250	1	03DB-I521
	10	Analytical	4.6 x 250	1	03DB-E531
	10	Prep	10.0 x 150	1	03DB-H431
	10	Prep	10.0 x 250	1	03DB-H531
	10	Prep	21.2 x 150	1	03DB-I431
	10	Prep	21.2 x 250	1	03DB-I531
	10	Prep	30.0 x 150	1	03DB-J431
10	Prep	30.0 x 250	1	03DB-J531	
10	Prep	50.0 x 150	1	03DB-K431	
10	Prep	50.0 x 250	1	03DB-K531	



VertiSep™ AQS

Ordering Information					
Phase	Particle Size (µm)	Formats	I.D. Length (mm)	QTY	Part No.
VertiSep™ AQS					
Ph	3	Ultra-Fast	2.1 x 10	1	03DD-B111
	3	Ultra-Fast	2.1 x 20	1	03DD-B611
	3	Ultra-Fast	2.1 x 50	1	03DD-B211
	3	LC/MS	2.1 x 100	1	03DD-B311
	3	LC/MS	2.1 x 150	1	03DD-B411
	3	LC/MS	3.2 x 100	1	03DD-C311
	3	LC/MS	3.2 x 150	1	03DD-C411
	3	Hi-Speed	4.6 x 50	1	03DD-E211
	3	Analytical	4.6 x 100	1	03DD-E311
	3	Analytical	4.6 x 150	1	03DD-E411
	3	Hi-Speed	7.8 x 50	1	03DD-G211
	3	Analytical	7.8 x 100	1	03DD-G311
	5	LC/MS	2.1 x 100	1	03DD-B321
	5	LC/MS	2.1 x 150	1	03DD-B421
	5	LC/MS	3.2 x 100	1	03DD-C321
	5	LC/MS	3.2 x 150	1	03DD-C421
	5	LC/MS	3.2 x 250	1	03DD-C521
	5	Hi-Speed	4.6 x 50	1	03DD-E221
	5	Analytical	4.6 x 100	1	03DD-E321
	5	Analytical	4.6 x 150	1	03DD-E421
	5	Analytical	4.6 x 250	1	03DD-E521
	5	Prep	10.0 x 150	1	03DD-H421
	5	Prep	10.0 x 250	1	03DD-H521
	5	Prep	21.2 x 150	1	03DD-I421
	5	Prep	21.2 x 250	1	03DD-I521
	10	Analytical	4.6 x 250	1	03DD-E531
	10	Prep	10.0 x 150	1	03DD-H431
	10	Prep	10.0 x 250	1	03DD-H531
	10	Prep	21.2 x 150	1	03DD-I431
	10	Prep	21.2 x 250	1	03DD-I531
	10	Prep	30.0 x 150	1	03DD-J431
	10	Prep	30.0 x 250	1	03DD-J531
	10	Prep	50.0 x 150	1	03DD-K431
	10	Prep	50.0 x 250	1	03DD-K531

Ordering Information					
Phase	Particle Size (µm)	Formats	I.D. Length (mm)	QTY	Part No.
VertiSep™ AQS					
CN	3	Ultra-Fast	2.1 x 10	1	03DE-B111
	3	Ultra-Fast	2.1 x 20	1	03DE-B611
	3	Ultra-Fast	2.1 x 50	1	03DE-B211
	3	LC/MS	2.1 x 100	1	03DE-B311
	3	LC/MS	2.1 x 150	1	03DE-B411
	3	LC/MS	3.2 x 100	1	03DE-C311
	3	LC/MS	3.2 x 150	1	03DE-C411
	3	Hi-Speed	4.6 x 50	1	03DE-E211
	3	Analytical	4.6 x 100	1	03DE-E311
	3	Analytical	4.6 x 150	1	03DE-E411
	3	Hi-Speed	7.8 x 50	1	03DE-G211
	3	Analytical	7.8 x 100	1	03DE-G311
	5	LC/MS	2.1 x 100	1	03DE-B321
	5	LC/MS	2.1 x 150	1	03DE-B421
	5	LC/MS	3.2 x 100	1	03DE-C321
	5	LC/MS	3.2 x 150	1	03DE-C421
	5	LC/MS	3.2 x 250	1	03DE-C521
	5	Hi-Speed	4.6 x 50	1	03DE-E221
	5	Analytical	4.6 x 100	1	03DE-E321
	5	Analytical	4.6 x 150	1	03DE-E421
	5	Analytical	4.6 x 250	1	03DE-E521
	5	Prep	10.0 x 150	1	03DE-H421
	5	Prep	10.0 x 250	1	03DE-H521
	5	Prep	21.2 x 150	1	03DE-I421
	5	Prep	21.2 x 250	1	03DE-I521
	10	Analytical	4.6 x 250	1	03DE-E531
	10	Prep	10.0 x 150	1	03DE-H431
	10	Prep	10.0 x 250	1	03DE-H531
	10	Prep	21.2 x 150	1	03DE-I431
	10	Prep	21.2 x 250	1	03DE-I531
	10	Prep	30.0 x 150	1	03DE-J431
	10	Prep	30.0 x 250	1	03DE-J531
	10	Prep	50.0 x 150	1	03DE-K431
	10	Prep	50.0 x 250	1	03DE-K531



Ordering Information					
Phase	Particle Size (µm)	Formats	I.D. Length (mm)	QTY	Part No.
VertiSep™ AQS					
NH2	3	Ultra-Fast	2.1 x 10	1	03DF-B111
	3	Ultra-Fast	2.1 x 20	1	03DF-B611
	3	Ultra-Fast	2.1 x 50	1	03DF-B211
	3	LC/MS	2.1 x 100	1	03DF-B311
	3	LC/MS	2.1 x 150	1	03DF-B411
	3	LC/MS	3.2 x 100	1	03DF-C311
	3	LC/MS	3.2 x 150	1	03DF-C411
	3	Hi-Speed	4.6 x 50	1	03DF-E211
	3	Analytical	4.6 x 100	1	03DF-E311
	3	Analytical	4.6 x 150	1	03DF-E411
	3	Hi-Speed	7.8 x 50	1	03DF-G211
	3	Analytical	7.8 x 100	1	03DF-G311
	5	LC/MS	2.1 x 100	1	03DF-B321
	5	LC/MS	2.1 x 150	1	03DF-B421
	5	LC/MS	3.2 x 100	1	03DF-C321
	5	LC/MS	3.2 x 150	1	03DF-C421
	5	LC/MS	3.2 x 250	1	03DF-C521
	5	Hi-Speed	4.6 x 50	1	03DF-E221
	5	Analytical	4.6 x 100	1	03DF-E321
	5	Analytical	4.6 x 150	1	03DF-E421
	5	Analytical	4.6 x 250	1	03DF-E521
	5	Prep	10.0 x 150	1	03DF-H421
	5	Prep	10.0 x 250	1	03DF-H521
	5	Prep	21.2 x 150	1	03DF-I421
	5	Prep	21.2 x 250	1	03DF-I521
	10	Analytical	4.6 x 250	1	03DF-E531
	10	Prep	10.0 x 150	1	03DF-H431
	10	Prep	10.0 x 250	1	03DF-H531
	10	Prep	21.2 x 150	1	03DF-I431
	10	Prep	21.2 x 250	1	03DF-I531
	10	Prep	30.0 x 150	1	03DF-J431
	10	Prep	30.0 x 250	1	03DF-J531
	10	Prep	50.0 x 150	1	03DF-K431
	10	Prep	50.0 x 250	1	03DF-K531

Ordering Information					
Phase	Particle Size (µm)	Formats	I.D. Length (mm)	QTY	Part No.
VertiSep™ AQS					
Si	3	Ultra-Fast	2.1 x 10	1	03DG-B111
	3	Ultra-Fast	2.1 x 20	1	03DG-B611
	3	Ultra-Fast	2.1 x 50	1	03DG-B211
	3	LC/MS	2.1 x 100	1	03DG-B311
	3	LC/MS	2.1 x 150	1	03DG-B411
	3	LC/MS	3.2 x 100	1	03DG-C311
	3	LC/MS	3.2 x 150	1	03DG-C411
	3	Hi-Speed	4.6 x 50	1	03DG-E211
	3	Analytical	4.6 x 100	1	03DG-E311
	3	Analytical	4.6 x 150	1	03DG-E411
	3	Hi-Speed	7.8 x 50	1	03DG-G211
	3	Analytical	7.8 x 100	1	03DG-G311
	5	LC/MS	2.1 x 100	1	03DG-B321
	5	LC/MS	2.1 x 150	1	03DG-B421
	5	LC/MS	3.2 x 100	1	03DG-C321
	5	LC/MS	3.2 x 150	1	03DG-C421
	5	LC/MS	3.2 x 250	1	03DG-C521
	5	Hi-Speed	4.6 x 50	1	03DG-E221
	5	Analytical	4.6 x 100	1	03DG-E321
	5	Analytical	4.6 x 150	1	03DG-E421
	5	Analytical	4.6 x 250	1	03DG-E521
	5	Prep	10.0 x 150	1	03DG-H421
	5	Prep	10.0 x 250	1	03DG-H521
	5	Prep	21.2 x 150	1	03DG-I421
	5	Prep	21.2 x 250	1	03DG-I521
	10	Analytical	4.6 x 250	1	03DG-E531
	10	Prep	10.0 x 150	1	03DG-H431
	10	Prep	10.0 x 250	1	03DG-H531
	10	Prep	21.2 x 150	1	03DG-I431
	10	Prep	21.2 x 250	1	03DG-I531
	10	Prep	30.0 x 150	1	03DG-J431
	10	Prep	30.0 x 250	1	03DG-J531
	10	Prep	50.0 x 150	1	03DG-K431
	10	Prep	50.0 x 250	1	03DG-K531

VertiSep™ AQS

HPLC Columns

Ordering Information					
Phase	Particle Size (µm)	Formats	I.D. Length (mm)	QTY	Part No.
VertiSep™ AQS					
DIOL	3	Ultra-Fast	2.1 x 10	1	03DP-B111
	3	Ultra-Fast	2.1 x 20	1	03DP-B611
	3	Ultra-Fast	2.1 x 50	1	03DP-B211
	3	LC/MS	2.1 x 100	1	03DP-B311
	3	LC/MS	2.1 x 150	1	03DP-B411
	3	LC/MS	3.2 x 100	1	03DP-C311
	3	LC/MS	3.2 x 150	1	03DP-C411
	3	Hi-Speed	4.6 x 50	1	03DP-E211
	3	Analytical	4.6 x 100	1	03DP-E311
	3	Analytical	4.6 x 150	1	03DP-E411
	3	Hi-Speed	7.8 x 50	1	03DP-G211
	3	Analytical	7.8 x 100	1	03DP-G311
	5	LC/MS	2.1 x 100	1	03DP-B321
	5	LC/MS	2.1 x 150	1	03DP-B421
	5	LC/MS	3.2 x 100	1	03DP-C321
	5	LC/MS	3.2 x 150	1	03DP-C421
	5	LC/MS	3.2 x 250	1	03DP-C521
	5	Hi-Speed	4.6 x 50	1	03DP-E221
	5	Analytical	4.6 x 100	1	03DP-E321
	5	Analytical	4.6 x 150	1	03DP-E421
	5	Analytical	4.6 x 250	1	03DP-E521
	5	Prep	10.0 x 150	1	03DP-H421
	5	Prep	10.0 x 250	1	03DP-H521
	5	Prep	21.2 x 150	1	03DP-I421
	5	Prep	21.2 x 250	1	03DP-I521
	10	Analytical	4.6 x 250	1	03DP-E531
	10	Prep	10.0 x 150	1	03DP-H431
	10	Prep	10.0 x 250	1	03DP-H531
	10	Prep	21.2 x 150	1	03DP-I431
	10	Prep	21.2 x 250	1	03DP-I531
	10	Prep	30.0 x 150	1	03DP-J431
	10	Prep	30.0 x 250	1	03DP-J531
	10	Prep	50.0 x 150	1	03DP-K431
	10	Prep	50.0 x 250	1	03DP-K531



Ordering Information					
Phase	Particle Size (µm)	Formats	I.D. Length (mm)	QTY	Part No.
VertiSep™ AQS Guard Cartridges*					
C18	3	Guard	2.1 x 10	2	03DA-B113
	3	Guard	3.2 x 10	2	03DA-C113
	3	Guard	4.6 x 10	2	03DA-E113
	5	Guard	2.1 x 10	2	03DA-B123
	5	Guard	3.2 x 10	2	03DA-C123
	5	Guard	4.6 x 10	2	03DA-E123
	5	Guard	10.0 x 10	2	03DA-H123
	5	Guard	21.2 x 10	2	03DA-I123
	10	Guard	4.6 x 10	2	03DA-E133
	10	Guard	10.0 x 10	2	03DA-H133
C8	10	Guard	21.2 x 10	2	03DA-I133
	3	Guard	2.1 x 10	2	03DB-B113
	3	Guard	3.2 x 10	2	03DB-C113
	3	Guard	4.6 x 10	2	03DB-E113
	5	Guard	2.1 x 10	2	03DB-B123
	5	Guard	3.2 x 10	2	03DB-C123
	5	Guard	4.6 x 10	2	03DB-E123
	5	Guard	10.0 x 10	2	03DB-H123
	5	Guard	21.2 x 10	2	03DB-I123
	10	Guard	4.6 x 10	2	03DB-E133
Ph	10	Guard	10.0 x 10	2	03DB-H133
	10	Guard	21.2 x 10	2	03DB-I133
	3	Guard	2.1 x 10	2	03DD-B113
	3	Guard	3.2 x 10	2	03DD-C113
	3	Guard	4.6 x 10	2	03DD-E113
	5	Guard	2.1 x 10	2	03DD-B123
	5	Guard	3.2 x 10	2	03DD-C123
	5	Guard	4.6 x 10	2	03DD-E123
	5	Guard	10.0 x 10	2	03DD-H123
	5	Guard	21.2 x 10	2	03DD-I123
CN	10	Guard	4.6 x 10	2	03DD-E133
	10	Guard	10.0 x 10	2	03DD-H133
	10	Guard	21.2 x 10	2	03DD-I133
	3	Guard	2.1 x 10	2	03DE-B113
	3	Guard	3.2 x 10	2	03DE-C113
	3	Guard	4.6 x 10	2	03DE-E113
	5	Guard	2.1 x 10	2	03DE-B123
	5	Guard	3.2 x 10	2	03DE-C123
	5	Guard	4.6 x 10	2	03DE-E123
	5	Guard	10.0 x 10	2	03DE-H123
	5	Guard	21.2 x 10	2	03DE-I123
	10	Guard	4.6 x 10	2	03DE-E133
	10	Guard	10.0 x 10	2	03DE-H133
	10	Guard	21.2 x 10	2	03DE-I133

Ordering Information					
Phase	Particle Size (µm)	Formats	I.D. Length (mm)	QTY	Part No.
VertiSep™ AQS Guard Cartridges*					
NH2	3	Guard	2.1 x 10	2	03DF-B113
	3	Guard	3.2 x 10	2	03DF-C113
	3	Guard	4.6 x 10	2	03DF-E113
	5	Guard	2.1 x 10	2	03DF-B123
	5	Guard	3.2 x 10	2	03DF-C123
	5	Guard	4.6 x 10	2	03DF-E123
	5	Guard	10.0 x 10	2	03DF-H123
	5	Guard	21.2 x 10	2	03DF-I123
	10	Guard	4.6 x 10	2	03DF-E133
	10	Guard	10.0 x 10	2	03DF-H133
Si	10	Guard	21.2 x 10	2	03DF-I133
	3	Guard	2.1 x 10	2	03DG-B113
	3	Guard	3.2 x 10	2	03DG-C113
	3	Guard	4.6 x 10	2	03DG-E113
	5	Guard	2.1 x 10	2	03DG-B123
	5	Guard	3.2 x 10	2	03DG-C123
	5	Guard	4.6 x 10	2	03DG-E123
	5	Guard	10.0 x 10	2	03DG-H123
	5	Guard	21.2 x 10	2	03DG-I123
	10	Guard	4.6 x 10	2	03DG-E133
DIOL	10	Guard	10.0 x 10	2	03DG-H133
	10	Guard	21.2 x 10	2	03DG-I133
	3	Guard	2.1 x 10	2	03DP-B113
	3	Guard	3.2 x 10	2	03DP-C113
	3	Guard	4.6 x 10	2	03DP-E113
	5	Guard	2.1 x 10	2	03DP-B123
	5	Guard	3.2 x 10	2	03DP-C123
	5	Guard	4.6 x 10	2	03DP-E123
	5	Guard	10.0 x 10	2	03DP-H123
	5	Guard	21.2 x 10	2	03DP-I123
	10	Guard	4.6 x 10	2	03DP-E133
	10	Guard	10.0 x 10	2	03DP-H133
	10	Guard	21.2 x 10	2	03DP-I133

*Guard holder required

Ordering Information		
Description	QTY	Part No.
Guard Holder with Coupler		
For column I.D. 2.1-7.8 mm	1	0300-0001
For column I.D. 10 mm	1	0300-0002
For column I.D. 21.2 mm	1	0300-0003

