

# SepTech™ Prep Columns

SIMPLIFY HPLC PROCESS DEVELOPMENT USING SEPTech C18 PRE-PACKED COLUMNS



*SepTech C18 bulk media, designed for high performance separations at high capacity, is now available in pre-packed dynamic axial compression (DAC) hardware, Dynamax™, for method development and small-scale separations. These pre-packed columns provide a rapid alternative for process development using a column format that has the same principle of operation as would be used for large-scale purification.*

## Key Benefits

- ▶ SepTech C18 Dynamax preparative columns eliminate the need to self-pack DAC columns for media screening and process development, saving time and reducing costs.
- ▶ The unique hardware design maintains the packed bed integrity and eliminates voids, so increasing the column lifetime.
- ▶ The dynamic axial compression format is the same principle of operation as used in the larger process columns and so provides continuity of operation for linear scale-up to full production.
- ▶ The Dynamax end fitting hardware can be re-used on any Dynamax compression module of the same diameter, so giving a lower unit cost compared with a conventional column of the same dimensions.

NOTICE: This document contains references to Varian. Please note that Varian, Inc. is now part of Agilent Technologies. For more information, go to [www.agilent.com/chem](http://www.agilent.com/chem).

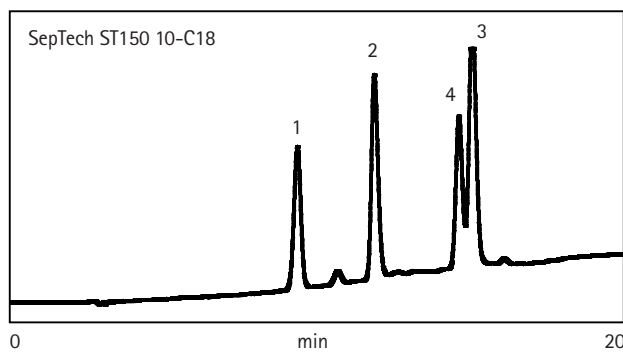
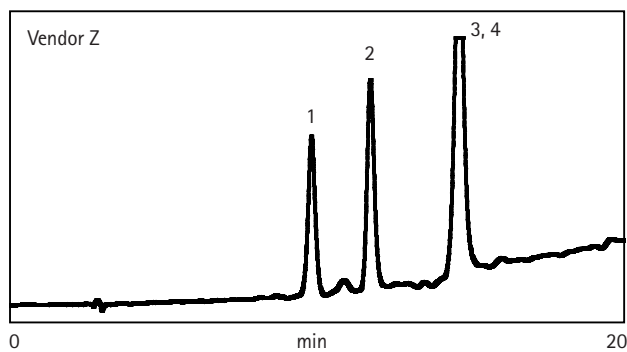
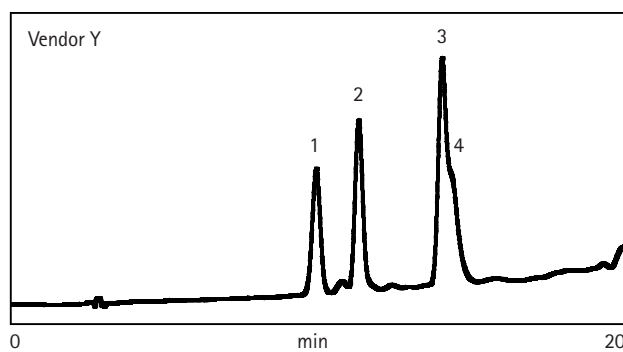
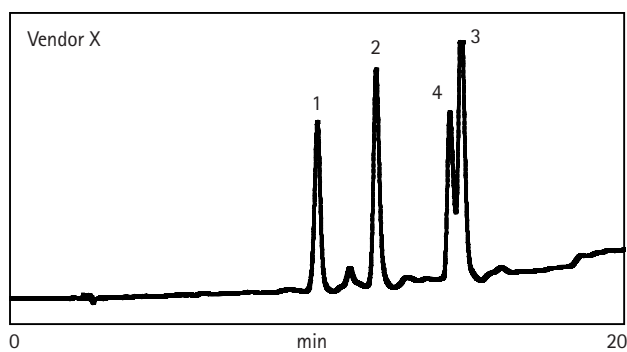
# SepTech™ Prep Columns

SepTech 10-C18 media was specifically engineered for use in preparative to process HPLC. The two pore sizes, 60Å and 150Å, have been optimized to give high capacity for small molecules and larger natural molecules and peptides, respectively. The bulk media is available for packing small-scale purification and process development columns, such as the bench top Load Et Lock™ hardware from Varian and in larger quantities for subsequent production columns.

For laboratories that prefer to use pre-packed preparative columns for small-scale work, Varian now offers the SepTech media pre-packed in Dynamax hardware. The Dynamax hardware is a unique patented design, which is ideally suited to small-scale and prep/process development. The principle of operation is dynamic axial compression, which maintains the packed bed integrity

and eliminates voids – providing a high performance column over a longer period of time. It is a component system, a pre-packed compression module, onto which the Dynamax end fitting hardware is easily installed. The end fitting hardware can be re-used on any Dynamax module of the same diameter, so reducing the preparative column hardware costs.

By providing SepTech 10-C18 media packed in the Dynamax hardware, Varian is able to offer a pre-packed prep column for small scale purifications and process development which is convenient and cost effective to use. As the columns utilize DAC technology, methods developed on the Dynamax columns will directly scale up to full production when linear scale up is applied.



## KEY

1. Oxytocin
2. Angiotensin II
3. Angiotensin I
4. Insulin

Figure 1: Comparison of the separation of oxytocin, angiotensin II, angiotensin I and insulin on the SepTech ST150 10-C18 media and three commercially available silica preparative media using ethanol as the organic modifier.

Eluent A: 0.1% TFA in 99% water : 1% ethanol  
Eluent B: 0.1% TFA in 1% water : 99% ethanol  
Gradients: 20-60% B in 20 minutes  
Detector: UV, 220 nm  
Linear Velocity: 360 cm/h  
Temp: Ambient

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Figure 2: The two options for configuring a Dynamax column and column with guard - hardware kits are available for the range of column diameters.

## Ordering Information and Specifications

Product Description	mm L x ID	Part Number
SepTech ST60 10-C18 Screening Column	250 x 4.6	A8060250X046
SepTech ST60 10-C18 Dynamax Column	50 x 10	A8060050DG100
SepTech ST60 10-C18 Dynamax Column	250 x 10	A8060250DM100
SepTech ST60 10-C18 Dynamax Column	50 x 21.4	A8060050DG214
SepTech ST60 10-C18 Dynamax Column	250 x 21.4	A8060250DM214
SepTech ST60 10-C18 Dynamax Column	50 x 41.4	A8060050DG414
SepTech ST60 10-C18 Dynamax Column	250 x 41.4	A8060250DM414

Product Description	mm L x ID	Part Number
SepTech ST150 10-C18 Screening Column	250 x 4.6	A8150250X046
SepTech ST150 10-C18 Dynamax Column	50 x 10	A8150050DG100
SepTech ST150 10-C18 Dynamax Column	250 x 10	A8150250DM100
SepTech ST150 10-C18 Dynamax Column	50 x 21.4	A8150050DG214
SepTech ST150 10-C18 Dynamax Column	250 x 21.4	A8150250DM214
SepTech ST150 10-C18 Dynamax Column	50 x 41.4	A8150050DG414
SepTech ST150 10-C18 Dynamax Column	250 x 41.4	A8150250DM414

## Dynamax Column Hardware Kits

Product Description	Part Number
Dynamax End Fitting Kit #1 for 10.0 mm	R000083810
Dynamax End Fitting Kit #2 for 10.0 mm	R000083812
Dynamax End Fitting Kit #1 for 21.4 mm	R000083820
Dynamax End Fitting Kit #2 for 21.4 mm	R000083822
Dynamax End Fitting Kit #1 for 41.4 mm	R000083840
Dynamax End Fitting Kit #2 for 41.4 mm	R000083842

Product Description	Part Number
Dynamax Guard Holder for 10.0 mm	R000083814
Dynamax Guard Holder for 21.4 mm	R000083824
Dynamax Guard Holder for 41.4 mm	R000083844
Dynamax Guard Coupling Assay for 10.0 mm	R000083811
Dynamax Guard Coupling Assay for 21.4 mm	R000083821
Dynamax Guard Coupling Assay for 41.4 mm	R000083841

End Fitting Kit #1 is for columns where a guard is not used

End Fitting Kit #2 is for columns using a guard

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Other sales offices and dealers throughout the world—check our Web site.

