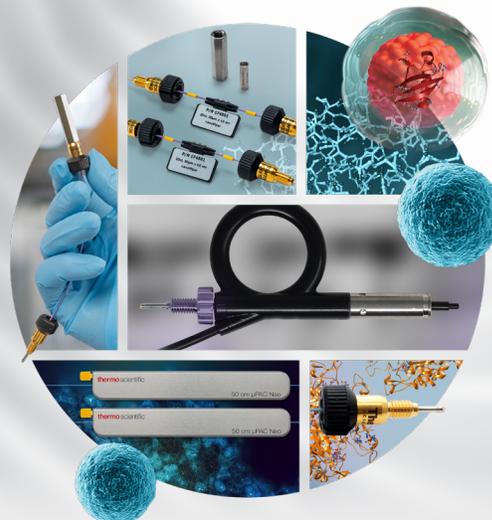


HPLC columns

# Low-flow HPLC columns

Enabling high sensitivity LC-MS analysis for bottom-up and top-down proteomic research



## Proteomic research columns

Thermo Fisher Scientific has a range of low-flow chromatography columns to meet your analytical and budgetary needs. Select the column that best suits your workflow.

	Pillar array column format	Packed bed column format	
	Thermo Scientific™ $\mu$ PAC™ Neo HPLC Columns	Thermo Scientific™ EASY-Spray™ HPLC Columns	Thermo Scientific™ Double nanoViper™ HPLC Columns
Technology			
Benefits	<p><b>Ultimate separation</b></p> <ul style="list-style-type: none"> <li>• Excellent retention time stability</li> <li>• A unique combination of performance and reliability to get the highest sample coverage every time</li> <li>• Separate emitters</li> <li>• Compatible with all low-flow U/HPLC instruments</li> <li>• Bottom-up proteomic analysis</li> </ul>	<p><b>Ease-of-use</b></p> <ul style="list-style-type: none"> <li>• Click-and-spray connect with Thermo Scientific™ EASY-Spray™ Source</li> <li>• Thermo Scientific™ nanoViper™ connections</li> <li>• Integrated column and emitter</li> <li>• Integrated temperature control</li> <li>• For use with Thermo Scientific™ mass spectrometry systems</li> </ul>	<p><b>Analytical flexibility</b></p> <ul style="list-style-type: none"> <li>• Universal Thermo Scientific™ nanoViper™ Fingertight Fittings for column inlet and outlet</li> <li>• Simple zero-dead-volume (ZDV) connections</li> <li>• Separate emitters</li> <li>• Compatible with all low-flow U/HPLC instruments</li> </ul>
Application areas/chemistries	<p>Deliver excellent column-to-column reproducibility with flow rate flexibility. Ideally suited for proteomic analyses of HPLC separations up to 450 bar.</p> <ul style="list-style-type: none"> <li>• 50 cm column: 15–60 min gradient time</li> <li>• 110 cm column: 90–150 min gradient time</li> <li>• 50 cm Low Load column: single cell analysis 15–60 min gradient time</li> <li>• High Throughput column: &lt;15 min gradient time</li> </ul>	<p><b>Bottom-up proteomic applications</b> The Thermo Scientific™ PepMap™ Neo UHPLC Columns are a recent addition to our portfolio. PepMap Neo columns are packed to higher pressure, which provides 1500 bar pressure rating, improved column-to-column consistency, and increased efficiency.</p> <p><b>Top- and middle-down proteomic applications</b> The Thermo Scientific™ MAbPac™ Capillary Reversed-Phase HPLC Column is best suited for the characterization of intact proteins in top- and middle-down proteomic applications where sample amount is limited.</p>	

## Ordering information

### EASY-Spray columns

Part number	Column type	Column I.D.	Column length
<b>Bottom-up proteomic columns</b>			
ES75150PN	PepMap Neo	75 µm	150 mm
ES75500PN	PepMap Neo	75 µm	500 mm
ES75750PN	PepMap Neo	75 µm	750 mm
<b>Top-down proteomic columns</b>			
ES907	MABPac Capillary RP	150 µm	150 mm



### Double nanoViper columns

Part number	Column type	Column I.D.	Column length
<b>Bottom-up proteomic columns</b>			
DNV75150PN	PepMap Neo	75 µm	150 mm
DNV75500PN	PepMap Neo	75 µm	500 mm
DNV75750PN	PepMap Neo	75 µm	750 mm
<b>Top-down proteomic columns</b>			
164947	MABPac Capillary RP	150 µm	150 mm



### µPAC Neo columns

Part number	Column type	Column length	Flow rate range	Sample loading	Gradient time
<b>Bottom-up proteomic columns</b>					
COL-NANO050NEOB	µPAC Neo column	50 cm	100–750 nL/min	10–500 ng	15–60 min
COL-NANO110NEOB	µPAC Neo column	110 cm	100–750 nL/min	500–2,000 ng	90–150 min
COL-LOLO050NEOB	µPAC Neo Low Load column	50 cm	100–750 nL/min	0.1–1 ng	15–60 min
COL-CAPHTNEOB	µPAC Neo High Throughput column	5.5 cm	100–2,500 nL/min	10–500 ng	<15 min



Find out more at [thermofisher.com/lowflowHPLCcolumns](https://thermofisher.com/lowflowHPLCcolumns)

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