

Got Purification Troubles? Get Reproducible Purification Scale-Up Results Faster with Prepacked Process-Scale Chromatography Columns



The Challenge

Is it difficult to reproduce laboratory purification results at process scale?



Purification Tip

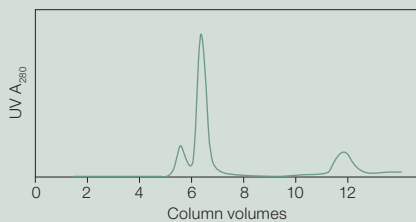
For best results, use prepacked columns from resin manufacturers who are experts in the resin packing methodology and have optimized the column design for high performance, consistency, and efficiency.



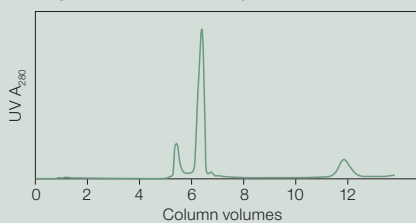
Our Approach

We evaluated three prepacked columns from 1.6 to 33 cm column inner diameter (ID) with 20 cm bed height. Each column used in the study was prepacked with CHT™ Ceramic Hydroxyapatite Type I Media (40 µm particle size). A sample mixture containing bovine serum albumin, lysozyme, and lactoferrin was loaded to 0.8–1 mg/ml bed volume. A buffer of 5 mM sodium phosphate and 10 mM NaCl, pH 7.2, was used for equilibration. The sample mixture was eluted at 100 cm/hr in a linear gradient of 5 mM sodium phosphate, 10 mM NaCl, pH 7.2, to 400 mM sodium phosphate, pH 7.2, over 10 column volumes (CV), followed by a 3 CV hold in the high phosphate buffer.

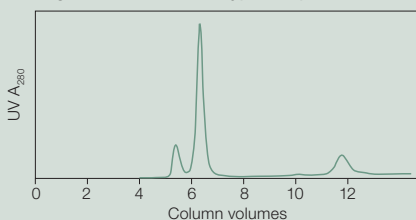
Laboratory column, CHT Type I, 40 µm, 1.6 x 20 cm



Foresight™ Pro Column, CHT Type I, 40 µm, 8 x 20 cm



Foresight Pro Column, CHT Type I, 40 µm, 33 x 20 cm



The consistent purification profiles observed across all three columns indicate that the Foresight Pro Column design and CHT Media packing methodology are optimized, delivering reproducible results across a range of column sizes. Foresight Pro Columns offer an efficient and scalable solution to streamline the purification process.



Foresight Pro Columns

Foresight Pro Columns are ready-to-use GMP process-scale columns available in CHT Type I, Type II, and XT Media. The columns are available with inner diameters from 5 to 33 cm and column bed heights of 10 or 20 cm, offering flexibility and productivity from development to manufacturing. Visit bio-rad.com/ForesightPro for more information.

Ordering Information

Catalog #	Description	Catalog #	Description
Foresight Pro Column, CHT Type I, 40 µm		Foresight Pro Column, CHT Type II, 40 µm, 9.0 L, 24 cm ID x 20 cm length	
12014659	Foresight Pro Column, CHT Type I, 40 µm, 0.2 L, 5 cm ID x 10 cm length	12014708	Foresight Pro Column, CHT Type II, 40 µm, 9.0 L, 24 cm ID x 20 cm length
12014660	Foresight Pro Column, CHT Type I, 40 µm, 0.4 L, 5 cm ID x 20 cm length	12014709	Foresight Pro Column, CHT Type II, 40 µm, 8.5 L, 33 cm ID x 10 cm length
12014671	Foresight Pro Column, CHT Type I, 40 µm, 0.5 L, 8 cm ID x 10 cm length	12014710	Foresight Pro Column, CHT Type II, 40 µm, 17 L, 33 cm ID x 20 cm length
12014672	Foresight Pro Column, CHT Type I, 40 µm, 1.0 L, 8 cm ID x 20 cm length	Foresight Pro Column, CHT XT, 40 µm	
12014673	Foresight Pro Column, CHT Type I, 40 µm, 0.8 L, 10 cm ID x 10 cm length	12014725	Foresight Pro Column, CHT XT, 40 µm, 0.2 L, 5 cm ID x 10 cm length
12014674	Foresight Pro Column, CHT Type I, 40 µm, 1.5 L, 10 cm ID x 20 cm length	12014726	Foresight Pro Column, CHT XT, 40 µm, 0.4 L, 5 cm ID x 20 cm length
12014675	Foresight Pro Column, CHT Type I, 40 µm, 1.3 L, 13 cm ID x 10 cm length	12014727	Foresight Pro Column, CHT XT, 40 µm, 0.5 L, 8 cm ID x 10 cm length
12014676	Foresight Pro Column, CHT Type I, 40 µm, 2.7 L, 13 cm ID x 20 cm length	12014728	Foresight Pro Column, CHT XT, 40 µm, 1.0 L, 8 cm ID x 20 cm length
12014677	Foresight Pro Column, CHT Type I, 40 µm, 3.1 L, 20 cm ID x 10 cm length	12014729	Foresight Pro Column, CHT XT, 40 µm, 0.8 L, 10 cm ID x 10 cm length
12014678	Foresight Pro Column, CHT Type I, 40 µm, 6.3 L, 20 cm ID x 20 cm length	12014730	Foresight Pro Column, CHT XT, 40 µm, 1.5 L, 10 cm ID x 20 cm length
12014679	Foresight Pro Column, CHT Type I, 40 µm, 4.5 L, 24 cm ID x 10 cm length	12014731	Foresight Pro Column, CHT XT, 40 µm, 1.3 L, 13 cm ID x 10 cm length
12014680	Foresight Pro Column, CHT Type I, 40 µm, 9.0 L, 24 cm ID x 20 cm length	12014732	Foresight Pro Column, CHT XT, 40 µm, 2.7 L, 13 cm ID x 20 cm length
12014681	Foresight Pro Column, CHT Type I, 40 µm, 8.5 L, 33 cm ID x 10 cm length	12014733	Foresight Pro Column, CHT XT, 40 µm, 3.1 L, 20 cm ID x 10 cm length
12014682	Foresight Pro Column, CHT Type I, 40 µm, 17 L, 33 cm ID x 20 cm length	12014734	Foresight Pro Column, CHT XT, 40 µm, 6.3 L, 20 cm ID x 20 cm length
Foresight Pro Column, CHT Type II, 40 µm		12014735	Foresight Pro Column, CHT XT, 40 µm, 4.5 L, 24 cm ID x 10 cm length
12014697	Foresight Pro Column, CHT Type II, 40 µm, 0.2 L, 5 cm ID x 10 cm length	12014736	Foresight Pro Column, CHT XT, 40 µm, 9.0 L, 24 cm ID x 20 cm length
12014698	Foresight Pro Column, CHT Type II, 40 µm, 0.4 L, 5 cm ID x 20 cm length	12014737	Foresight Pro Column, CHT XT, 40 µm, 8.5 L, 33 cm ID x 10 cm length
12014699	Foresight Pro Column, CHT Type II, 40 µm, 0.5 L, 8 cm ID x 10 cm length	12014738	Foresight Pro Column, CHT XT, 40 µm, 17 L, 33 cm ID x 20 cm length
12014700	Foresight Pro Column, CHT Type II, 40 µm, 1.0 L, 8 cm ID x 20 cm length	<p>Visit bio-rad.com/ScreeningTools for more information on Foresight screening tools.</p> 	
12014701	Foresight Pro Column, CHT Type II, 40 µm, 0.8 L, 10 cm ID x 10 cm length		
12014702	Foresight Pro Column, CHT Type II, 40 µm, 1.5 L, 10 cm ID x 20 cm length		
12014703	Foresight Pro Column, CHT Type II, 40 µm, 1.3 L, 13 cm ID x 10 cm length		
12014704	Foresight Pro Column, CHT Type II, 40 µm, 2.7 L, 13 cm ID x 20 cm length		
12014705	Foresight Pro Column, CHT Type II, 40 µm, 3.1 L, 20 cm ID x 10 cm length		
12014706	Foresight Pro Column, CHT Type II, 40 µm, 6.3 L, 20 cm ID x 20 cm length		
12014707	Foresight Pro Column, CHT Type II, 40 µm, 4.5 L, 24 cm ID x 10 cm length		

Visit bio-rad.com/ScreeningTools for more information on Foresight screening tools.



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