

Contact: Pegeen Dos Santos

Phone: +1 781 533 5336

Email: pegeen.dossantos@emdmillipore.com

News Release

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EMD Millipore Introduces Three New Resins for its Chromabolt® Prepacked Chromatography Columns

- Columns available prepacked with strong cation exchangers, weak cation exchangers or strong anion exchangers
- Saves time by eliminating manual column packing and cleaning
- Designed for pilot and early clinical manufacturing

Darmstadt, Germany, October 21, 2014 — [EMD Millipore](#), the life science division of [Merck KGaA](#) of Darmstadt, Germany, announces the availability of three new chromatography resins for its Chromabolt® prepacked columns. These pre-validated chromatography columns can come packed with either strong cation exchangers, weak cation exchangers or strong anion exchangers, freeing up end users' time and resources by eliminating manual column packing and cleaning.

Designed for pilot and early clinical manufacturing, the Chromabolt® columns are now available packed with the following resins:

- Strong cation exchanger
 - Fractogel® EMD SE Hicap (**New**)
 - Eshmuno® S
 - Fractogel® EMD SO₃
- Weak cation exchanger
 - Fractogel® EMD COO(M) (**New**)
- Strong anion exchanger

EMD Millipore is a division of Merck KGaA, Darmstadt, Germany.

- Eshmuno[®] Q **(New)**
- Fractogel[®] EMD TMAE Hicap

“The biopharmaceutical industry is in need of downstream processing solutions to improve efficiency, reduce costs, and accelerate overall time to market,” said Andrew Bulpin, Executive Vice President of EMD Millipore, Process Solutions. “Chromabolt[®] prepacked chromatography columns have helped our customers streamline their early clinical-stage manufacturing by eliminating laborious packing requirements. Expanding our portfolio of available resins allows a greater number of biomanufacturers to leverage Chromabolt[®] technology for different applications.”

Chromabolt[®] columns are available in three sizes – 10cm, 20cm and 32cm inner diameter (i.d.) – each with a 20cm fixed bed height. They are manufactured with automated equipment to ensure reproducible specifications and eliminate the human errors associated with manual packing. The columns are compatible with all currently available chromatography systems and connectors, have easily accessible inlets and outlets, and offer faster set-up and cleaning times compared to traditional columns. Ergonomic and easily transportable by a single person, the 20 cm and 32 cm sizes are on wheels.

EMD Millipore will continue to add additional chromatography resins to the Chromabolt[®] column portfolio over the next few years.

For more information please visit: <http://www.emdmillipore.com/chromabolt>.

About EMD Millipore

EMD Millipore is the Life Science division of Merck KGaA of Darmstadt, Germany and offers a broad range of innovative, performance products, services and business relationships that enable our customers' success in research, development and production of biotech and pharmaceutical drug therapies. Through dedicated collaboration on new scientific and engineering insights, and as one of the top three R&D investors in the Life Science Tools industry, EMD Millipore serves as a strategic partner to customers and helps advance the promise of life science. Headquartered in Billerica, Massachusetts, the division has around 10,000 employees, operations in 66 countries and 2013 revenues of €2.6 billion.



About Merck KGaA, Darmstadt, Germany

Merck KGaA of Darmstadt, Germany, is a leading company for innovative and top-quality high-tech products in the pharmaceutical and chemical sectors. Its subsidiaries in Canada and the United States operate under the umbrella brand EMD. Around 39,000 employees work in 66 countries to improve the quality of life for patients, to further the success of customers and to help meet global challenges. The company generated total revenues of € 11.1 billion in 2013 with its four divisions: Biopharmaceuticals, Consumer Health, Performance Materials and Life Science Tools. Merck KGaA of Darmstadt, Germany is the world's oldest pharmaceutical and chemical company – since 1668, the name has stood for innovation, business success and responsible entrepreneurship. Holding an approximately 70 percent interest, the founding family remains the majority owner of the company to this day.