

## News Release

Jill DeCoste  
+1 978 715 4670  
[jill.decoste@emdmillipore.com](mailto:jill.decoste@emdmillipore.com)

April 23, 2015

### EMD Millipore Introduces Magna ChIRP™ RNA Interactome Kits for the Analysis of Chromatin-Associated RNAs

- **Simplifies performance of the ChIRP method by providing all components in one validated kit**
- **Uses RNA as a target to reliably recover chromatin complexes**
- **Identifies sites of genomic interaction for chromatin-associated RNA**

Billerica, Massachusetts, April 23, 2015 – [EMD Millipore](#), the Life Science business of [Merck KGaA](#) of Darmstadt, Germany, today introduced Magna ChIRP™ RNA Interactome Kits, which allow researchers to more easily identify, recover and analyze regions of chromatin that interact with chromatin-associated RNAs such as long non-coding RNA (lncRNA). The highly effective multiprobe-based capture strategy uses cross-linked chromatin to provide reliable detection and discovery of RNA-associated genomic DNA sequences, RNA sequences and proteins.

The new kits use the ChIRP method (Chromatin Isolation by RNA Purification) to isolate chromatin complexes using RNA as the target, allowing researchers to pinpoint specific sites of genomic interaction for chromatin-associated RNAs. The kits simplify the ChIRP method, providing all necessary buffers, enzymes and reagents in one validated kit, as well as a negative control probe set and detailed protocol with capture probe design guidelines. In addition, first-time users can opt for the EZ-Magna ChIRP™ kit, which includes a positive control capture probe set and detection primers that make it easier to validate an experiment's success.

## News Release

The ChIRP method was first described by researchers at Stanford University in 2011<sup>1</sup>. The technique offered significant potential for lncRNA studies, but the protocol was complex, requiring many different reagents which needed to be sourced from different providers. In addition, the challenging procedure limited use to researchers with strong expertise in the area. The all-in-one Magna ChIRP™ RNA Interactome Kits simplify the process, enabling all laboratories to effectively leverage the ChIRP method.

“Noncoding RNA has become an increasingly prominent area of study in recent years, after researchers discovered that DNA sequence alone does not determine a cell’s genetic fate,” said Patrick Schneider, Ph.D., Head of Bioscience. “A significant amount of research is now being conducted to understand how chromatin-associated RNAs influence gene expression and epigenetic regulation. Magna ChIRP™ RNA Interactome Kits make the ChIRP method accessible to all researchers, offering a simplified way of studying the interactions of chromatin-associated RNAs.”

The kits guide researchers through a process in which they cross-link and lyse cells, sonicate chromatin and hybridize biotinylated capture oligos, which bind to the complementary RNA sequence. Then, EMD Millipore’s PureProteome™ Streptavidin magnetic beads are added, which are included in the kits to allow robust pull down of any chromatin binding to the target RNA. After the beads are washed, the DNA, RNA, and protein components can be isolated for further analysis. The protocol eliminates non-specific signals by utilizing split pools of capture probes (even/odd) to allow unambiguous identification of specific interactions.

For more information, please visit [www.emdmillipore.com/chirp](http://www.emdmillipore.com/chirp).

### About EMD Millipore

EMD Millipore is the U.S. Life Science subsidiary of Merck KGaA, Darmstadt, Germany. As part of the global Life Science business of Merck KGaA, Darmstadt, Germany, EMD Millipore 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, the Life Science business of Merck KGaA, Darmstadt, Germany, serves as a strategic partner to customers and helps advance the promise of life science. Headquartered in Billerica,

---

<sup>1</sup> Chu C, Qu K, Zhong FL, Artandi SE, Chang HY. Genomic maps of long noncoding RNA occupancy reveal principles of RNA-chromatin interactions. *Mol Cell*. 2011 Nov 18;44(4):667-78.

## News Release

Massachusetts, the global business has around 10,000 employees, operations in 66 countries and 2014 revenues of €2.7 billion.

For more information, please visit [www.emdmillipore.com](http://www.emdmillipore.com).

### **About Merck KGaA, Darmstadt, Germany**

Merck KGaA, Darmstadt, Germany, is a leading company for innovative and top-quality high-tech products in healthcare, life science and performance materials. The company has six businesses – Biopharmaceuticals, Consumer Health, Allergopharma, Biosimilars, Life Science and Performance Materials – and generated sales of € 11.3 billion in 2014. Around 39,000 employees work in 66 countries to improve the quality of life for patients, to foster the success of customers and to help meet global challenges. Merck KGaA, Darmstadt, Germany, is the world's oldest pharmaceutical and chemical company – since 1668, the company has stood for innovation, business success and responsible entrepreneurship. Holding an approximately 70% interest, the founding family remains the majority owner of the company to this day. Merck KGaA, Darmstadt, Germany holds the global rights to the Merck name and brand. The only exceptions are Canada and the United States, where the company operates as EMD Serono, EMD Millipore and EMD Performance Materials.

For more information, please visit [www.emdgroup.com](http://www.emdgroup.com).