

## FOR IMMEDIATE RELEASE

### EpiCypher® announces the launch of CUTANA™ (ChIC / CUT&RUN / CUT&Tag) for next-generation genomic mapping studies

**Research Triangle Park, NC – 23 July 2019** – EpiCypher, Inc. announces the commercial licensing of ChIC (University of Geneva) and CUT&RUN / CUT&Tag (Fred Hutchinson Cancer Research Center) technologies. These breakthrough tools reflect EpiCypher's growing influence and expertise in epigenetics, and expand our product portfolio to include ultra-sensitive / robust chromatin profiling reagents, kits and services. Of note, this announcement precedes the August 2019 release of EpiCypher's Protein A-Protein G-Micrococcal Nuclease (pAG-MNase), the critical reagent for ChIC / CUT&RUN workflows. In the coming months, EpiCypher will offer additional CUT&RUN / CUT&Tag reagents, user-friendly kits and end-to-end services under the CUTANA™ platform.

ChIC (Chromatin ImmunoCleavage) was developed by Dr. Ulrich K. Laemmli's laboratory at the University of Geneva and centered on the fusion of Protein A to Micrococcal Nuclease (pA-MNase) for the selective cleavage of antibody-bound chromatin. The CUT&RUN (Cleavage Under Targets & Release Using Nuclease) and CUT&Tag (Cleavage Under Targets & Tagmentation) methods were developed by the group of Dr. Steven Henikoff, a Howard Hughes Medical Institute investigator at Fred Hutchinson Cancer Research Center. CUT&RUN builds on ChIC by immobilizing cells / nuclei on solid support, which enables efficient isolation of pA-MNase cleaved DNA fragments from solution. Dr. Henikoff's recently published CUT&Tag is a modification of CUT&RUN, which uses Protein A fused to a hyperactive transposase loaded with sequencing adaptors (pA-Tn5) to expedite sample processing and sequencing library preparation.

ChIC and CUT&RUN / CUT&Tag strategies have revolutionized the study of histone post-translational modifications (PTMs) and chromatin-associated proteins. Compared to ChIP-seq, the leading approach for genome-wide mapping of histone PTMs and chromatin-associated proteins, CUT&RUN / CUT&Tag require substantially fewer cells (including single cell analysis from bulk samples by CUT&Tag), are compatible with low sequencing depths, and have markedly improved [signal : noise]. EpiCypher's optimized pAG-MNase is the first-in-class commercial product for CUT&RUN assays, accelerating sample processing and allowing a substantial reduction in sequencing depth without any sacrifice in data quality. This reagent enables the unprecedented use of benchtop sequencers (e.g. Illumina® MiniSeq or MiSeq) to directly generate genomic mapping profiles, making the approach widely accessible to chromatin scientists and dramatically improving experimental throughput.

*"ChIC and CUT&RUN technologies directly address several pressing and unmet needs in the chromatin field,"* said Dr. Michael-Christopher Keogh, Chief Scientific Officer at EpiCypher. *"CUTANA will enable scientists to profile more samples, at greater resolution, in less time, and at reduced cost. These capability gains will fundamentally change how the field approaches genome-wide chromatin mapping studies."*

EpiCypher is a global leader in enabling genome-wide chromatin analyses, best exemplified by the recent development and commercialization of SNAP-ChIP®, a transformative spike-in reagent for ChIP assay quantification and antibody validation. EpiCypher is currently transferring this spike-in technology to CUT&RUN / CUT&Tag, which will allow *in situ* antibody specificity testing and the quantitative normalization of sequencing data. Moving forward, EpiCypher will continue to build relationships with leading scientists in academia and industry to develop innovative tools that will accelerate chromatin research and ultimately improve human health.

**About EpiCypher®** - A pioneer in the field of epigenetics and chromatin biology, EpiCypher is a biotechnology company developing transformative technologies to advance chromatin science and improve human health. EpiCypher manufactures and sells a series of products and assay platforms that use recombinant "designer" nucleosomes (dNucs), including SNAP-ChIP® for quantitative ChIP applications, EpiDyne® for nucleosome remodeling assays, dCypher® to interrogate epigenetic regulators, recombinant histone binding proteins and enzymes, peptides and antibodies, and a broad range of custom substrate / assay development services.

#### Media Contact:

Dr. James Bone, Ph.D.  
(jbone@epicypher.com)