

EpiCypher® launches dCypher™: A service to discover novel chromatin binding interactions

Research Triangle Park, NC - 24 October 2018 – EpiCypher, Inc. has released dCypher, a revolutionary service leveraging EpiCypher’s expertise in post-translationally modified recombinant designer nucleosomes (dNucs) and histone peptides to deliver highly sensitive and fully customizable assays for the rapid interrogation of chromatin binding interactions.

Academic, pharmaceutical, and clinical research put the association between chromatin and human disease beyond question. Despite this fundamental understanding, there are few discovery-based tools available for epigenetics-focused drug and therapeutic development.

Part of the problem is the vast diversity of the epigenome. With >100 histone post-translational modifications (PTMs) identified to date, many of these occurring in combination, it is difficult to thoroughly characterize the binding specificity of novel chromatin-interacting proteins with existing technologies. Yet, understanding how putative chromatin interactors deal with this expanse of histone PTMs is essential to progress research and drug discovery efforts.

Histone peptide arrays have been the gold standard for histone PTM-protein interaction screens, but they are far from optimal. Due to their low sensitivity and variable signal, they require high amounts of purified protein to identify binding interactions. Even then, many binding targets with potential disease relevance have proven inaccessible to the approach.

dCypher now offers a unique solution to this problem, providing improved signal to noise with up to 2,000-fold less input material vs. peptide array, and giving results from low-affinity binders with unprecedented efficiency. dCypher customers will have access to EpiCypher’s library of ~300 histone peptides and ~75 dNucs, enabling customized analysis of interactions between chromatin readers and histone PTMs. Thus, dCypher provides scientists an innovative service that produces high-confidence data in a field often limited by reagents with low sensitivity and accuracy.

“dCypher positions EpiCypher at the forefront of epigenetics technology. It is truly enabling and integrates exquisitely sensitive, accurate and rapid screening technologies for chromatin-targeted drug discovery,” said Dr. Michael-Christopher Keogh, Chief Scientific Officer at EpiCypher. As dCypher is a fully customizable platform, any number and combination of PTMs may be screened in any context. This service will be of

particular use for target identification, validation studies, and identifying optimal substrates for drug inhibitor screens.

About EpiCypher -A pioneer in the field of epigenetics and chromatin biology, EpiCypher is a biotechnology company developing transformative technologies and delivering superior products to researchers worldwide. EpiCypher manufactures and sells recombinant “designer” modified nucleosomes (dNucs), including the SNAP-ChIP® product family for quantitative ChIP applications, as well as recombinant histone binding proteins, peptides and antibodies, and offers a broad range of custom substrate manufacturing and assay development services.

For more information about **dCypher™ services**, visit [EpiCypher.com/services/dcypher-assay-services-for-novel-chromatin-interactions](https://www.epicypher.com/services/dcypher-assay-services-for-novel-chromatin-interactions)

For more information about **EpiCypher**, visit [EpiCypher.com](https://www.epicypher.com)

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