Microarray that Reveals Histone Profile of Cells or Tissue (Yissum)

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Antibody microarray monitors histone modifications for cancer and other research

Categories	Research/development tools, Diagnostics, Biomarkers
Development Stage	Proof of concept
Patent Status	provisional US patent application filed
Market	Global market for biochip products was estimated at $2.6 billion in 2009, expected to increase to nearly $6 billion in 2014. Biochips currently undergoing transition from primarily research-and-development tools to applied applications in next-generation sequencing, drug discovery and development, and clinical diagnostics.

Highlights

- High throughput antibody microarray provides epigenetic profile of histone modification in cells or tissues in one go
- Currently Western blot tests are used to determine the state of each of the dozens of different histone modifications - time consuming and labor intensive procedure
- Uses in cancer diagnosis, to monitor cancer progress, to monitor effect of drugs on cells or tissues

Our Innovation

- High-throughput antibody microarrays suitable for all available antibodies to show histone modifications in cells or tissues

Development Milestones

- Seeking funding to purchase range of antibodies to develop microarray or industrial cooperation to provide antibodies

The Opportunity

- Histones have an important role in mood disorders, memory
- Histone profile changes with cancer progression – potential for cancer diagnosis
- Drugs that target histones (HDAC inhibitors) are a growing family of drugs that are beneficial for central nervous system disorders, neurodegenerative diseases, cancer and more. These arrays will enable efficient screening of the specific actions of novel and existing drugs.

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