

Chip-based microenzymeassay for kinase using antibody

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Abstract

Many new gene products are being discovered by large-scale genomics and proteomic strategies. the challenge is now to develop high throughput approaches to systematically analyze protein interactions and to assign a biological function. Recently, Microarrays of immobilized functional proteins have been used for the determination of analysis of protein-protein interactions and biochemical analysis of protein function. To realize an enzyme reaction on chips, we have developed chip-based microenzymeassay for kinase using fluorescence labeled antibody that employ extremely low sample volume and accurate, simultaneous processing of thousands of proteins. A high-precision robot designed to manufacture complementary DNA microarrays was used to spot proteins onto aldehyde glass sides at extremely high spatial densities.

Acknowledgement

This research was funded by Center for Ultramicrochemical Process Systems sponsored by KOSEF.

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