



The Chinese University of Hong Kong
Non-confidential Abstract of Technology Disclosure

Title:

System and Method for High-Throughput Screening of Crystallization Conditions of Proteins and for Bioassays

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Inventor(s):

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Patent Status:

US Patent Pending

Non-confidential abstract:

Microwell-based systems for performing submicroliter screening and assaying are presented. A simple and fast microfluidic method is provided to dispense picoliter to nanoliter volume of liquid to microwells. Mixing of the liquid in the microwells facilitate high-throughput screening and assaying, for example, protein crystallization, enzyme assay, and drug screening. It is possible for manufacturers to fabricate the microwell arrays that contain desired reagents, thus saving time and labor for researchers who can simply buy these microwell patches for experiments. The manufacturer has the opportunity to supply the user with consumables at an incremental cost. In the user's end, only a vacuum source, a micropipette will be needed to carry out experiments. This technique has been validated by crystallizing lysozyme, thaumatin, xylanase, and several novel proteins.

For further queries, please contact:

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