Fast and Microliter Reaction Platform for Biomedical Applications(Immunostaining, molecular probe hybridization, drug/reagent administration, cell spreading)

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Experience: https://scholars.lib.ntu.edu.tw/cris/rp/rp06291/information.html

Market Needs: Currently, immunostaining and detection are widely used in biomedical research, medical diagnostics, precise testing, rapid diagnosis, tissue staining outsourcing, drug development, immunotherapy, and antibody development companies. The immunoassay market was estimated to be USD 21.03 billion in 2020 and is projected to grow to USD 32.79 billion by 2028, with a Compound Annual Growth Rate (CAGR) of 5.8%

Our Technology: By utilizing a groundbreaking technology of micro-liter rapid thin-film direct coating, coupled with original coater and machine designs, it has successfully been applied to immunohistochemical staining and immunofluorescent staining. Compared to traditional immunohistochemical staining, it significantly reduces the usage of antibodies, reagents, and operation time. Currently, there is ongoing development of fast and an all-in-one staining machine to provide stable staining results. This technology can be applied in laboratory staining research, frozen section staining in pathology departments, or imprint cytology examinations to obtain rapid staining results.

Strength: There are several patent application for the micro-liter rapid coater have already been filed. Professor An-Bang Wang's laboratory specializes in the micro-liter rapid thin-film direct coating technology. This project involves collaboration between engineering and biomedical experts for its development.

Competing Products:
https://www.novodiax.com/ Q-Stain® X Autostainer

Intellectual Properties:
(1)ROC patents:I466732, I496625, I347863 ; US patents7824736B2, 9492836B2, 8257794B2

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