

Biofactory launches A*STAR technology-based ColoQuik kit

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Singapore: The Biofactory, a leading innovator in incubating biomedical and life sciences related technologies, introduced its ColoQuik line of label-free kits for the rapid colorimetric detection of protein-DNA interactions in biomedical research labs and the pharmaceutical industry.

These kits are based on technology licensed from the Institute of Materials Research and Engineering (IMRE), a research institute of the Agency for Science, Technology and Research (A*STAR), Singapore. The Biofactory has three kits in its pipeline, each customized for the assessment of well-known transcription factors in cancer, including ER β , ER γ , and p53.

The ColoQuik kits will be particularly suited for pharmaceutical companies or academic researchers who require tools for the analysis of protein-DNA interactions at a higher level of throughput. ColoQuik kits will find strong utility in primary screens for drugs that can modulate protein-DNA interactions, or in QC analyses of purified DNA-binding proteins based on their DNA-binding capacities. ColoQuik assays require only a half hour to complete on average, and allow for instant visual detection of reagent colour changes based on the quality and affinity of binding between a protein and a specified DNA sequence.

The test does not require radioactive or fluorescent labeling of DNA, which leads to significant time and cost savings on preparatory work. ColoQuik tests require only standard equipment such as microplate absorbance readers for semi-quantitative readouts. As such, these kits are amenable to high-throughput drug discovery applications and batch functional analysis of transcription factor production.

The key technology in the kits is the custom-made, nanometer-sized metal particles created at A*STAR's IMRE. The particles act as probes which give off different colours depending on the specific protein-DNA combinations that are formed in the

nanoparticle solution.