Rapid and Economical Method of Measuring Quantity or Activity of Enzymes

BYU #2019-016

DESCRIPTION

This invention consists of dehydrated bacterial-based cell-free protein synthesis sensor system as a rapid, portable, and economic alternative to existing measurement methods for the activity or quantity of enzymes, enzyme inhibitors, or transcription- and translation-dependent biomolecules.

PROBLEM SOLVED

Conventional measurement methods for the activity or quantity of enzymes and associated biomolecules tend to be expensive, are confined to a laboratory and require many hors and large sample volumes to execute. This technology addresses all these challenges and can also be integrated with a computer program.

KEY ADVANTAGES

- *Rapid and economical*
- *Requires only very small sample sizes*
- *Portable*

Offer:
License
Exclusive
World Wide
All Fields of Use

APPLICATIONS

Examples of applications include: a rapid method for quantifying serum glutamine levels in patients with anorexia nervosa, a rapid method for quantifying serum asparaginase levels in patients undergoing leukemia chemotherapy.

IP Status:
Patent Pending

Lead Inventor

Dr. Brad Bundy
PhD, Chemical Engineering

BYU TECHNOLOGY transfer

Mike Alder
mike_alder@byu.edu
(801) 422-6266