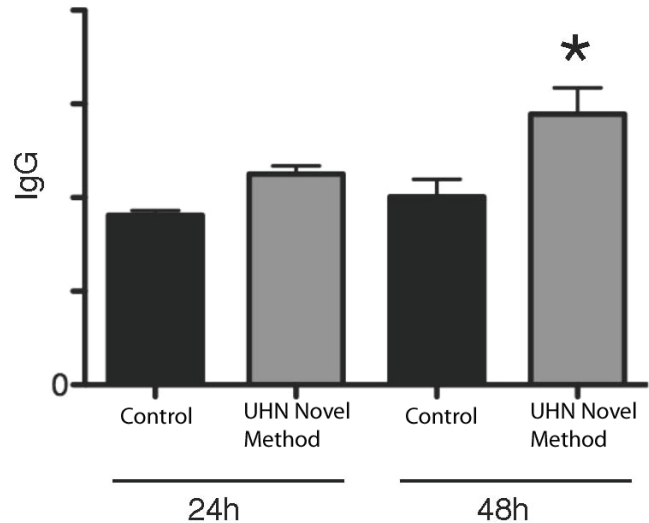


Novel Method for Increasing Antibody Production

Overview of Technology:

Monoclonal antibodies are effectively used in a variety of therapeutic, diagnostic, and research applications. In fact, recombinant proteins, including monoclonal antibodies, contribute to a significant portion of the \$60 billion worldwide therapeutic protein market. Similarly, the market for diagnostic proteins is on the order of \$40 billion worldwide and a large component of this market is monoclonal antibodies. As well, there is a large growing market for monoclonal antibodies for research purposes. It is estimated that majority of the recombinant proteins on the market are produced using mammalian cell lines. Due to the large need and uses of monoclonal antibodies for therapeutic, diagnostic, and research applications, production of these proteins need to be optimized to produce the largest yields of antibodies from mammalian cells.



To address this optimization issue, Dr. Stuart Berger at the University Health Network has developed novel methods to increase antibody production in a hybridoma cell line. His studies demonstrate that increasing the expression or activity of a mammalian protein implicated in protein translation initiation and control can result in significant increases in hybridoma cell antibody production.

Dr. Berger's technology has the potential to increase the production efficiency and cost-effectiveness in the development of antibodies used in a variety of applications.

Patent:

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