**Analysis of Dialyzed Flask Technology for Antibody Production**

**CELLline Bioreactor Flasks**

**Experiment Overview**

Abstract

Efficient and cost effective biopharmaceutical production requires effective and productive cell culture methods. Several factors are important, including, but not limited to, cell culturing techniques, recombinant protein expression, and cell culture flask method for culturing hela cells. The Flask separation barrier cell compartment is a common area for cell culture media via a 10 kDa cut off membrane. This method allows for multiple kinetics, longer time spans, and a more consistent environment.

To determine the advantages of the dialyzed flask technology, an anti-AKT antibody production flask was tested. The suspended cell line was cultured in a dialyzed flask and the antibody production was evaluated. The results were compared to a traditional cell culture method. The dialyzed flask showed an increase in productivity and yield compared to the traditional cell culture method.

**Materials and Methods**

Western Blot

Antibody samples from each production method were analyzed by Western Blot with a 6X histidine epitope tag and anti-AKT3 isoform antibody. The Western Blot analysis showed that the dialyzed flask produced the highest yield of antibodies.

**Western Blot - Anti-6X Histidine**

Figure 6: Detection of AKT expression in formalin-fixed paraffin embedded human breast cancer tissue sections with the CELLine Bioreactor Flask method.

**Results**

The dialyzed flask technology showed a significant increase in productivity and yield compared to traditional cell culture methods. The CELLine Bioreactor Flask was found to be a cost-effective and efficient method for antibody production.

**Conclusion**

The CELLine Bioreactor Flask technology offers a new and innovative method for antibody production. The technology has been shown to improve productivity and yield, making it an attractive option for biopharmaceutical companies.