



150 Cell Lines Banked in Frozen Microtiter Plates for Expression and Gene Analysis

Challenge

A top five Pharmaceutical Company wanted to improve the efficiency of analyzing their cell lines with flow cytometry as well as characterize their oncology cell lines for both surface marker expression and genetic analysis. However, they lacked the manpower and bandwidth to complete all this work.

Details

In their previous workflow, the client was struggling to maintain a database of the 150 cell lines they were using, as well as record the surface expression data and genetic analysis data associated with each cell line. The client also wanted to find a way to improve the efficiency of using flow cytometry to analyze their cell lines, as each line was being analyzed.

Solution

To address their resource constraints, ABS immediately put all 150 oncology cell lines into production. Each line in culture at the same time to produce a cryopreserved cell bank for future needs, live cells for flow cytometry analysis and frozen cell pellets for genetic analysis.

ABS collaborated with the client to fulfill their need of cryopreserving all 150 cell lines by developing an efficient method for future flow cytometry analysis, while simultaneously maintaining each cell line in culture and freezing all cell lines into 96-well plates.

ABS also developed a partnership with a CRO who measured the expression of the client's 14 surface marker antibodies on each live cell line with flow cytometry while also coordinating the shipping and data transfer between the CRO and the client

Benefits

The collaboration with ABS allowed the client's company to add all 150 cell lines to their database with the required surface marker expression data and genetic analysis data without having to add personnel or equipment to complete this project themselves. The frozen plates were successful and allowed the client to analyze multiple cell lines at the same time with one flow cytometry run. With this work done by ABS, it allowed the client to focus on their discovery research, rather than cell line production and cell line analysis.