

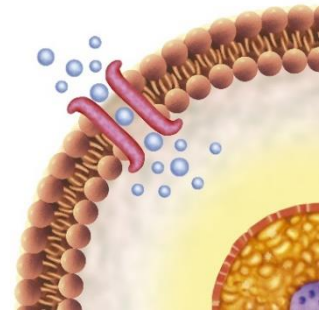


## Hundreds of Grams of Cell Membrane Preparations needed for Massive High-throughput Screening Campaign

**Challenge:** A top five Pharmaceutical Company had to complete a large screening project with a very short deadline. Even this large Pharmaceutical Company lacked the dedicated resources to complete this work on schedule.

**Details:** A radioligand binding was being used to screen compounds binding to a specific cell membrane target. Hundreds of grams of cell membranes were needed. Hundreds of billions of adherent cells needed to be grown very quickly and then membranes be prepared for the binding assay from these cells.

The enormity of the project and tight timelines were compounded by the fact the signal to noise ratio with the Company's own cell membrane preparations very low.



**Solution:** The Company contacted ABS to help. ABS immediately placed the cells into production in its cell culture laboratories. These were grown in a large number of cell factories and HyperStacks®.

As cell production was underway, ABS used its expertise in making cell membrane preparations to prepare a variety of preparations using both the company's and ABS' protocols. These were tested by the Company to find the optimal preparation. Cell membrane preparations were then made using the optimized protocol in large batches to ensure that there was little variation in screening results because of small membrane batches.

This massive effort and on time delivery was only possible because of ABS' large cell culture facility, downstream high-speed centrifugation capacity, and close collaborative effort with the Company.

**Benefits:** This collaboration with ABS had several major benefits for the Company:

- The screen was completed on schedule.
- This project was a short-term spike in activity. Collaboration with ABS enabled the successful completion of the project without the need for the Company to add personnel or equipment for this temporary scale-up effort.
- Working with ABS to optimize membrane preparations yielded better experimental results. This also helped to reduce overall costs.
- The work done by ABS freed Company resources for discovery rather than bioreagent production.