CASE STUDY

Monoclonal Antibody Achieved a Titer of 19.5 g/L Within 2.5 Months

Background

Based on GBB experiences, the client's titer level was below the average for equivalent products. After we have done abundant researches, the client thought their own cell line is potentially able to achieve a higher titer, but they did not have a proper workflow and sufficient optimization methods to do that, so they were looking for a mammalian cell line development and optimization services. The client requested a reasonable workflow, an improvement for their mABs, the short period to develop the cell line and the stable production during the scale-up process.

GBB's Solution

The client platform leverages full technology to rapidly develop high-yield and stable cell lines. Integrated with high-throughput instruments including Beacon, ClonePix, Ambr and deep learning algorithms, GBB's proprietary cell line engineering, conventionally screened, and development strategies, GBB provided the cell line process continuously optimizing.
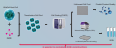
Development of high yield and stable cell lines using site-specific integration

Utilizing GBB's proprietary high-quality CHO cell line, the client's cell line could be rapidly developed and optimized with site-specific integration.

Clone screening and selection

HTP Cell Sorting, Selection, and Micro-intensity fragment instrument

Results

Sample	Final Titer (g/L)
Sample 1	11.0
Sample 2	15.8
Sample 3	17.6
Sample 4	19.5

GBB successfully established the cell line, obtained a titer of 19.5 g/L, achieving a client goal within 2.5 months, dramatically improving the titer level.