

Cell Line and Upstream Process Development Services Simplifying Progress

SARTURIUS

Cellca CHO Expression Platform

Sartorius is a leading provider of Cell Line Development Services allowing customers easy open access to a cost effective reliable technology platform. The Cellca CHO Expression Platform consistently delivers well characterized stable research clones from DNA to Research Cell Bank (RCB) in just 14 weeks with average titers of 4 g/L in an easily scalable fed batch process.

Key Components

DHFR selection system work of MTX amplification

Host Cell Line

- CHO DG44 growth in suspension
- 18 h doubling time
- Long term stability
- Host cell line fully documented & tested according to ICH & WHO

Expression Vector

- Metabolic Selection
- Low DHFR expression
- S/MAR elements
- Optimal signal peptide & promoter
- Freedom-to-operate

Media System

- Optimized for Cellca cell lines
- Chemically defined, free of animal components and proteins
- High cell densities, viabilities & productivity

Upstream Process Design

- Robust, east to transfer to client/ CMO
- Easy to scale, proven performance in various bioreactor systems
- Ready-to-use protocol

Vector Cloning

Transfection & Pool Generation

Single Cell Cloning

Clone Evaluation

RCB Preparation

From DNA to RCB in 14 weeks

Key Benefits

Speed

From DNA to high-titre RCB in 14 weeks. Save up to 3 months by omitting the need for scalability studies.

Track Record

More than 100 successfully completed projects using the Cellca CHO Expression Platform.

Performance

Consistently high titers – average 4 g/L and up to 8 g/L (12-14 day standard fed-batch process) for IgGs, bispecifics, Fcfusion proteins, enzymes and other recombinant proteins.

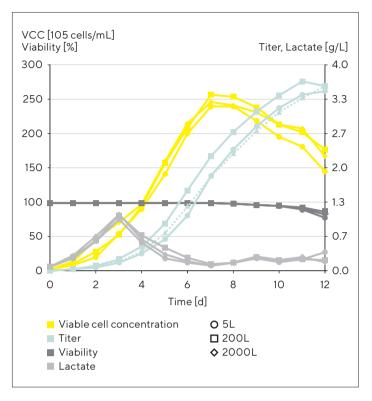
Scalability

Processes can be easily transferred and scaled-up to a range of bioreactors up to 2000 L.

Customer Focus

Committed project teams with dedicated project managers make it their purpose to deliver service excellence and meet our customer's requirements.

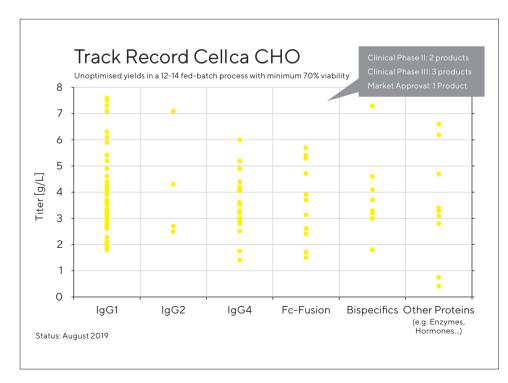
Scalability and Robustness





Easy & direct scalability from small scale to 2000L.

Cell Line Development: Track Record



>100 cell lines built to date

- Small, Medium and Big Pharma
- US, EU, Asia customers
- 80% returning customers

High experience with different product types:

- Monoclonal Antibodies (IgG1, IgG4, IgG2)
- Fusion Proteins
- Fab-related products
- Bispecifics
- Biosimilars
- Other recombinant and complex proteins

Global Facilities of Sartorius for Cell Line Development, Cell Bank Manufacturing and Testing



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