



High-Throughput  
and Essential Lab Tools  
to Streamline Cell Line  
Development

Simplifying Progress

**SARTORIUS**

# Innovative Technologies to Select the Right Clone



## Gene Cloning and Initial Clone Selection

Rapid screening of minipools for product titer, cell health and growth



## Clone Selection and Confirmatory Analysis

Early identification of high productivity clones with optimal critical quality attributes



## Cultivation and Media Optimization

Screen culture conditions and media formulations for optimal growth and protein production



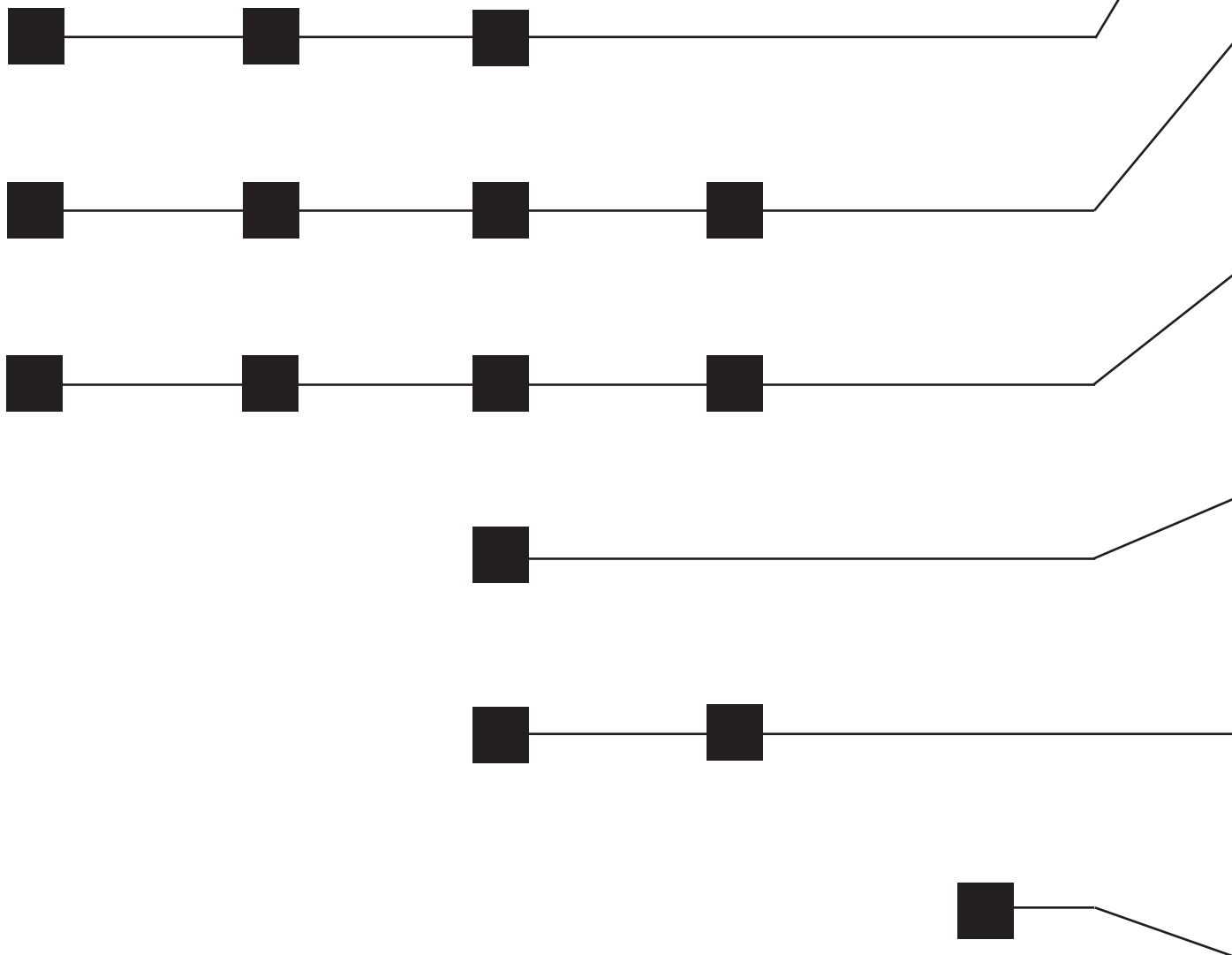
## Cell Line Evaluation and Characterization

Characterize top clone for stability, productivity, and quality attributes of the protein



## Cell Banking

Research Cell Bank (RCB), Master Cell Bank (MCB), and Working Cell Bank (WCB) preparation



# Solutions & Services for Cell Line Development

## Select and screen single cells for antibody discovery

The CellCelector single cell and colony picking platform is used for high-throughput single cell cloning, allowing fast generation of clonal production cell lines. Cell lines are produced in one round while providing in-process, image-verified monoclonality proof.

- Single cell cloning and picking
- Integrated monoclonality, viability and productivity proof
- Characterize tens of thousands of clones in parallel

## CellCelector Flex Automated Cell Imaging and Picking System



## Perform protein quantitation and kinetics characterization assays

Measure molecular interactions in real-time without the need for detection reagents and enable advanced, fast, and fluidics-free direct detection of specific biomolecules.

- Rapidly determine product titer
- Screen for specific glycosylation content
- Perform off-rate analysis using purified and unpurified samples

## Octet® Biolayer Interferometry (BLI) Detection Systems for Label-Free Detection



## Multiparametric and actionable results for more insight

A high-throughput, suspension cell and bead-based analysis platform for antibody screening and functional profiling. The fastest way to generate high content data from small sample volumes.

- Screen your libraries in days, not months
- Sample volumes as low as 1  $\mu$ L, reduce reagent costs
- Screen cells in suspension and targets in their natural conformation

## iQue® 3 High-Throughput Cytometry Platform



## Improve the overall efficiency and speed of your cell line and medias

**Ambr® 15 Cell Culture** is a high-throughput automated micro bioreactor for predictive cell line and media screening. Rapidly evaluate multiple bio reactor cultures at microscale, thus increasing your productivity in cell line development and saving on materials and labor.

- Rapid screening of clones and media optimization
- Data-rich culture profiles with automated sampling
- Large multifactorial experimental designs (DoE) in real-time

## Ambr® 15 Cell Culture Bioreactor System



**An automated, high throughput benchtop system** that performs a one-step clarification and purification process to streamline and automate mAb cell culture harvest coming from Ambr® 15 and other suspension cell cultures.

- Predefined templates, flexible process selection, and error recovery creates a walk-away process that reduces downtime
- Saves space and simplifies workflows by removing the need for separate centrifugation, filtration, and chromatography systems
- Detailed data recording and auditing for extended data analysis capabilities

## StreamLink® CC 15 mAb Sample Preparation



## Produce large, homogenous banks of cells under cGMP conditions

**Fill-it Automated Cell Banking System** offers improved consistency and shortens process times compared to manual processing, giving the potential to increase batch sizes for cell banking and dramatically reduce QC costs.

- Fits in a standard biosafety cabinet
- Facilitates easy loading and operation
- De-caps racks of cryovials held in either 96-, 48- or 24-vial racks
- Provides automated cell banking compatible with wide microtube range

## Fill-it Automated Cell Banking System



# Lab Essentials for Cell Line Development

Everyday lab essential products play a critical foundational role in the success of cell line development and are invaluable to lab technicians and scientists. Basic tasks like pipetting, filtration and purification of small volumes can be time-consuming and tedious. Sartorius' lab essentials help streamline routine tasks and achieve more accurate results by:



Increasing reproducibility of your results



Avoiding contamination in your processes



Increasing safety and reduce fatigue with ergonomic and easy-to-use products

## Pipetting

**Picus® 2** electronic pipettes ensure accurate results with an unbeatable ergonomic design. Connect Picus® 2 to your mobile device to smoothly run sample preparation workflows and adjust settings automatically, taking your productivity to the next level.



**Midi Plus** are lightweight, easy-to-use pipette controllers for large volumes applications.



## Standard and Buffer Preparation

The **Cubis® Dosing System** offers semi-automatic preparation and documentation of highly reproducible calibration standards for chromatography and spectroscopy.



## **Vivapure® and Sartobind® Membrane Adsorbers**

Rapid, easy target purification and contaminant removal by anion or cation exchange chromatography.



## Cubis® II Laboratory Balances

### 100% Configurable Laboratory Balance

With completely configurable hardware, software and connectivity, Cubis® II offers a high-performance balance that will align with your unique demands and compliance requirements.



## Arium® Type 1 Ultrapure Water Systems

ASTM Type 1 water, for general, analytic and life science applications, ensuring consistent, high-quality results, at all times.



## Mycoplasma Detection

Keep your cell cultures contaminant-free and compliant with **Microsart® Mycoplasma qPCR kits**.



## Lab Instrument Services

Certified and accredited services. Including:

- Installation/Equipment qualification (IQ/OQ)
- Extended warranty
- Calibration
- Preventive maintenance
- Service contracts, original spare parts



## Clarification, Concentration and Purification of Proteins

**Sartoclear Dynamics® Lab**

**Vivaspin® and Vivaflow®  
Ultrafiltration Devices**

**Vivapure® and Sartobind®  
Membrane Adsorbers**

**Minisart® Syringe filters  
Sartolab® RF | BT Vacuum  
Filtration Units**



# High Performance Cell Culture Media, Reagents, and Supplements

## Classical Cell Culture Media and Reagents

Ensure quality cell culture with a wide range of classical media and reagents to support the growth and maintenance of a variety of cells and cell lines. From establishing and maintaining basic cell cultures to more advanced cell models, Sartorius offers a range of optimized ready-to-use products designed to meet your research needs. Each lot is manufactured under a strictly controlled process according to a Product Master Record to provide lot-to-lot consistency. Our excellence and expertise provide you with the safest, most dependable, and consistent cell culture media products.

- Manufactured with the highest-grade raw materials, sourced from qualified and approved suppliers
- Ready-to-use media in concentrated liquid formulations
- Varied packaging options



## Transfection Reagents for Life Science Research

Our extensive range of ready-to-use transfection reagents are suitable for research involving most mammalian primary cells and cell lines. These best-in-class transfection products allow scientists to study the function of a protein of interest, its role in a signaling pathway, perform genome editing using plasmid-based or RNA-based proven methods, and to conduct cost-effective RNA interference to transfect guide RNA and express Cas9 protein in mammalian cells.

- Ready-to-use transfection reagents suitable for most mammalian primary cells and cell lines
- Specialized reagents for targeted gene expression, genome editing, and RNA interference studies



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