

AUTOMATED HIGH THROUGHPUT
CELL LINE GENERATION

RAPIDLY DEVELOP CELL LINES

FOR ANTIBODY AND RECOMBINANT PROTEIN PRODUCTION



 **STEMCELL**
TECHNOLOGIES

HAMILTON
THE MEASURE OF EXCELLENCE™

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STEMCELL Technologies, is a world leader in specialty cell culture media, cell separation products and other culture reagents. Driven by science and a passion for quality, STEMCELL delivers over 1000 products to more than 70 countries worldwide. To learn more about how STEMCELL helps to make research work, visit www.stemcell.com.

Founded over 50 years ago, Hamilton is the industry leader in robotic workstation innovation and sets the standards for reliability, performance, and flexibility. Hamilton has proudly maintained a pioneering spirit and earned the reputation for delivering the highest possible quality products.

Together, STEMCELL Technologies and Hamilton Company are proud to present the ClonaCell® EasyPick platform, the world's fastest system for colony isolation.

THE CLONACELL® EASYPICK PLATFORM



STEMCELL Technologies' automated platform for cell line generation merges the rapid selection and cloning of cells using ClonaCell® media with Hamilton's 30 years of experience in robotics to meet the three most important aspects of developing cell lines for biologics production: speed, throughput, and quality.

SPEED

Generate stable cell lines in as little as 14 days by combining selection and cloning using ClonaCell® media.

THROUGHPUT

Isolate up to 300 clones per hour in a fully automated environment.

QUALITY

Increase the probability of isolating rare high-yield clones with ClonaCell® media.

To see the ClonaCell® EasyPick in action, please visit www.clonacell.com



HAMILTON ROBOTICS

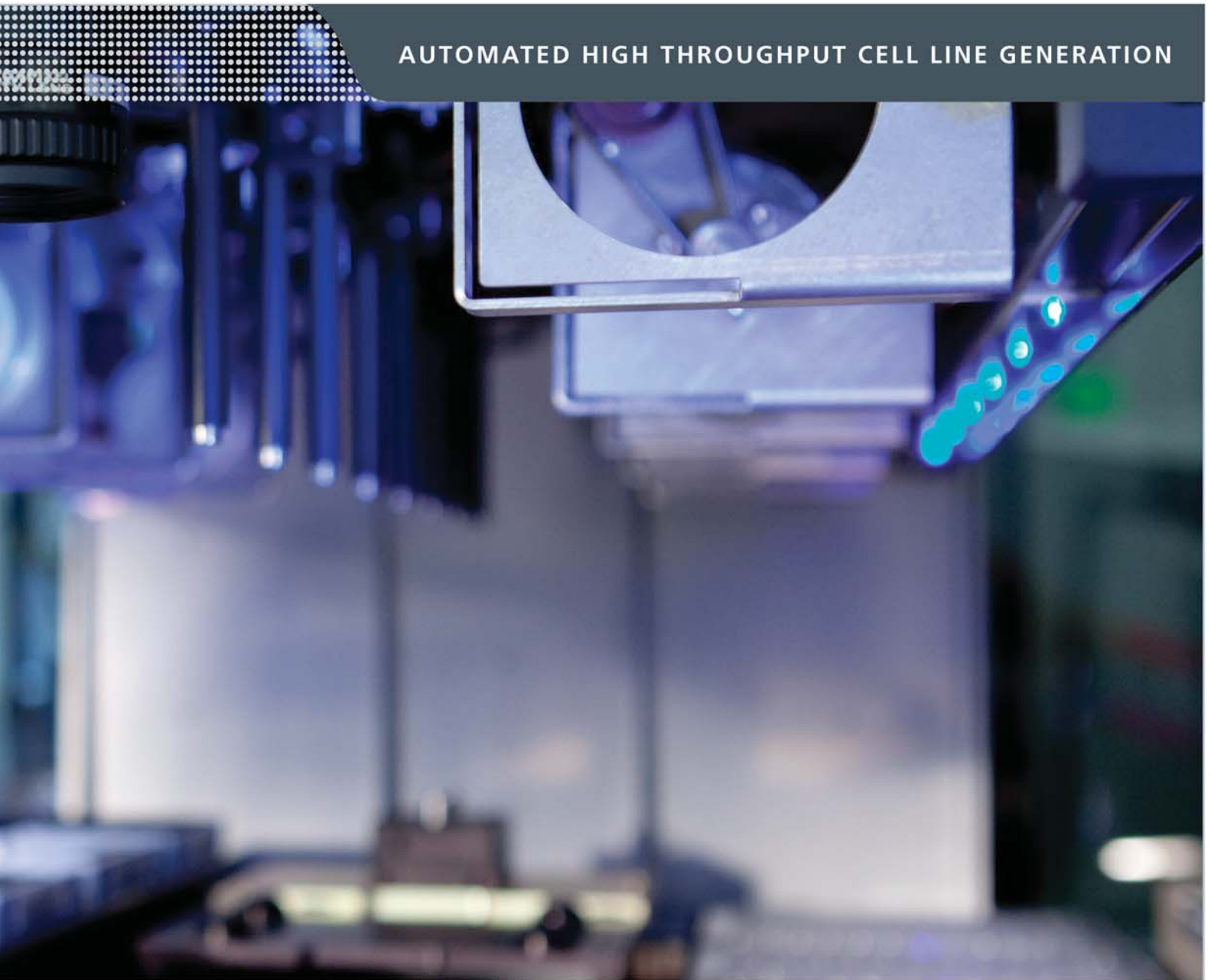
THE WORLD LEADER IN LIQUID HANDLING ROBOTICS



AIR DISPLACEMENT PIPETTING

Advanced technologies such as Monitored Air Displacement and Anti-Droplet Control confirm and record liquid handling processes and eliminate cross-contamination.





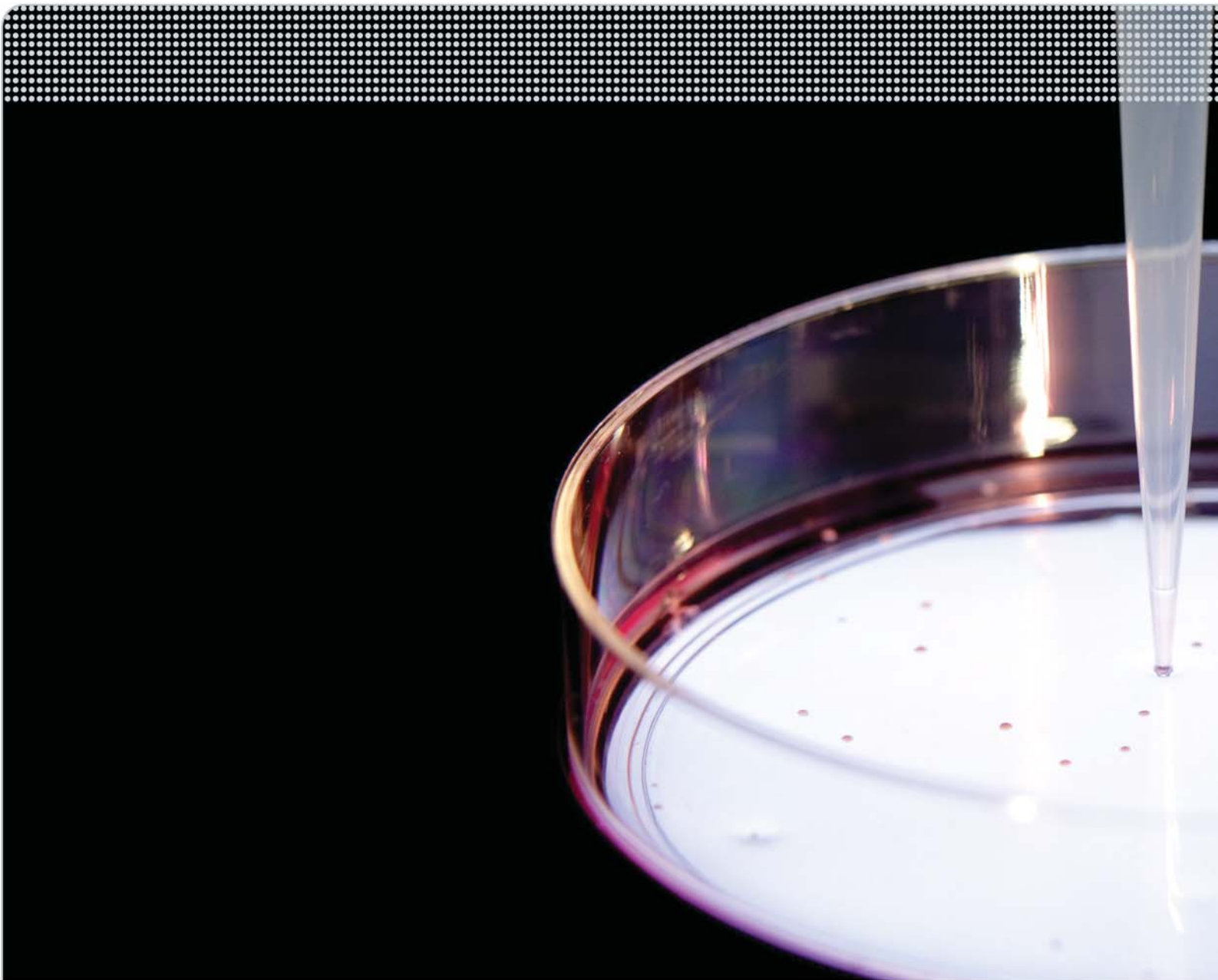
QUALITY AND RELIABILITY

Hamilton ensures the reliability of their instruments by testing each module with criteria that are higher than those required for the instrument as a whole. Its pipetting channels are tested for 10 million cycles during design and its core parts are manufactured in-house to the highest tolerances.



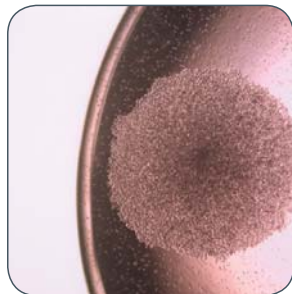
REGULATORY COMPLIANCE

The Hamilton robotics in the ClonaCell® EasyPick platform were specifically designed for regulated laboratories, offering all the tools you need for fully compliant GMP operation (including 21 CFR 11 compliance). Hamilton has served the clinical industry for many years, ensuring continued productivity in the demanding environment of drug discovery.



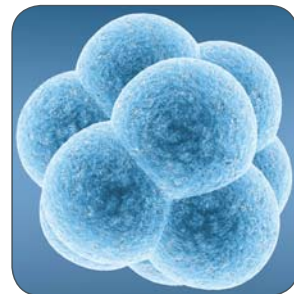
THE ADVANTAGE OF CLONACELL® MEDIA

SIMULTANEOUS SELECTION AND CLONING USING METHYLCELLULOSE-BASED



RAPID DEVELOPMENT TIME

Traditional methods of selecting and cloning hybridomas and transfected cells are performed in liquid culture and require several limiting dilutions and screening steps. ClonaCell® methylcellulose-based semi-solid media can combine selection and cloning in one easy step. Using ClonaCell®, stable cell lines can be generated in as little as 14 days.





SEMI-SOLID MEDIA

ISOLATE RARE CLONES

Selection in bulk liquid culture often leads to a mixture of fast- and slow-growing cells. Eventually, the culture becomes dominated by the faster-growing cells, which are sometimes non-producing. ClonaCell® semi-solid media overcome this limitation by keeping progeny in a colony together, and allow the simultaneous selection and cloning of cells. Not only does this reduce clone development time, it also increases the probability of isolating high-yielding clones.



CUSTOM FORMULATIONS

Custom formulations of ClonaCell® media can be designed to accommodate the unique needs of cell line developers. Serum-free media, animal component-free media, and completely chemically defined media can all be tailored for use with adherent and non-adherent cell lines. Please contact us at info@stemcell.com to discuss your specific requirements.



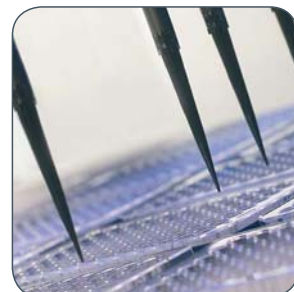
AUTOMATED HIGH THROUGHPUT COLONY

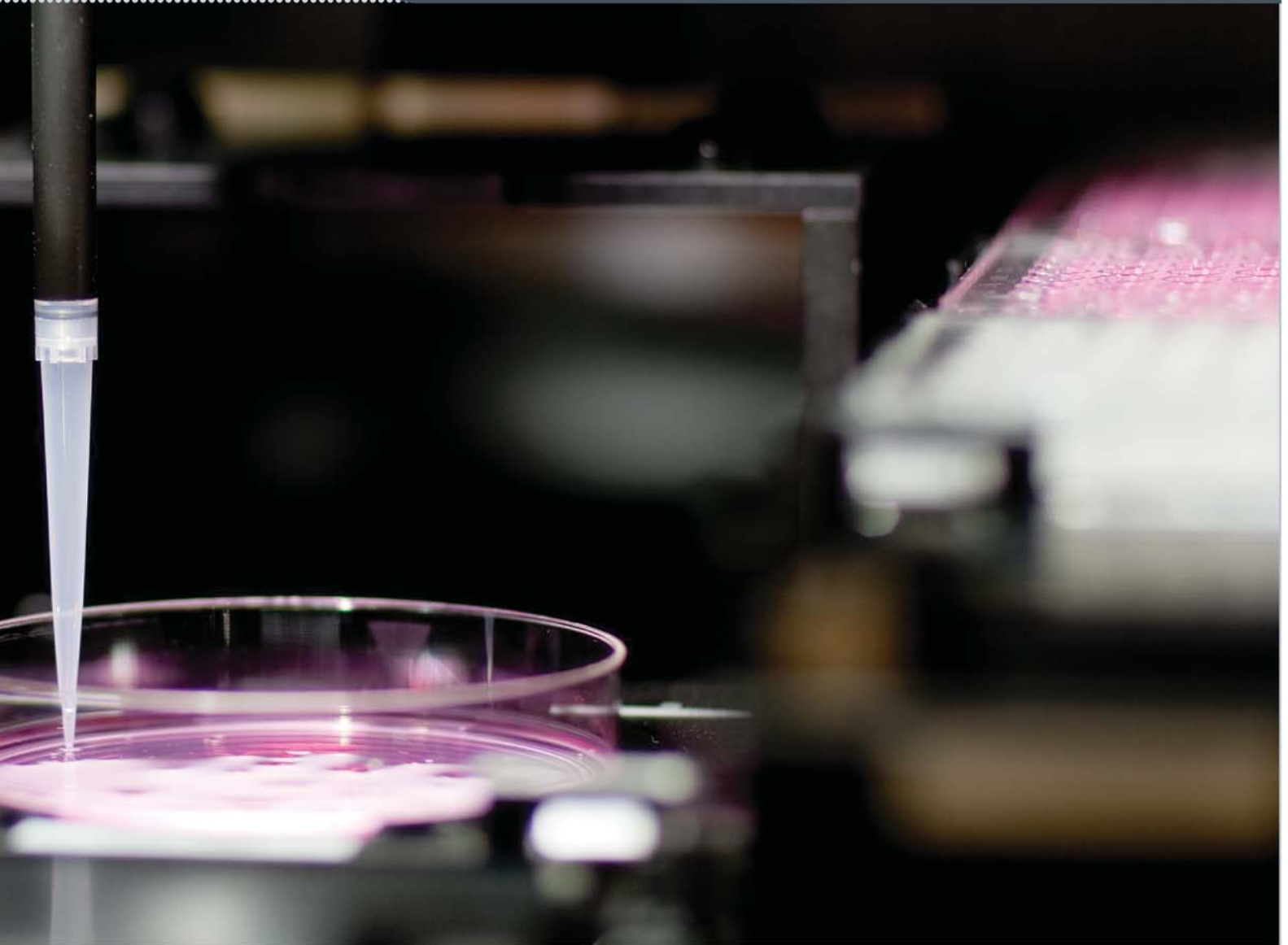
EACH CLONACELL® EASYPICK PLATFORM IS CUSTOM CONFIGURED AND AN INDIVIDUAL USER'S NEED FOR SPEED AND THROUGHPUT



MULTI-PARAMETER SELECTION

In the proprietary EasyPick software, multiple parameters are custom-defined and weighted to meet the requirements of each user. The custom-programmed software ensures process consistency and reliability in a manner tailored to each user's needs.





ISOLATION

PROGRAMMED TO MEET AND MAXIMIZE

SPEED AND THROUGHPUT

The ClonaCell® EasyPick platform is the world's fastest system for automated colony isolation. With the ability to perform up to 300 clone isolations per hour*, the ClonaCell® EasyPick not only improves process consistency, but presents significant time savings for scientists.

*Based on averaged values that include image acquisition time, image analysis time, and plate/lid movement time.



SCALABILITY AND VERSATILITY

The ClonaCell® EasyPick platform is designed for modularity and scalability. Automation of upstream and downstream processes such as cell culture and ELISA can be easily added to the ClonaCell® EasyPick platform. Scalability through the addition of workstations, pipetting heads, and plate handling tools ensures efficient resource management to meet the changing demands of drug discovery.

AUTOMATION ACCESSORIES

THE CLONACELL[®] EASYPICK PLATFORM OFFERS UNPARALLELED MODULARITY WITH NEARLY 10,000 POSSIBLE CONFIGURATIONS.

Examples of just some of the accessories available include:



iSWAP ROBOTIC HAND

This Gripper tool can access items on or off the deck. It is highly flexible with its vertical and rotary capabilities. The iSWAP may be used to integrate peripheral systems for incubation, plate storage, reading, washing, etc.



BARCODE SCANNING

The Autoload option reads barcodes from sample tubes, microplates, and carriers. It verifies correct labware positions for greater method security.



TEMPERATURE CONTROL

The 4-position Temperature Controlled Carrier provides consistent, monitored temperature regulation for microplates. The carrier temperature can be set to a maximum of 60°C and a minimum of 22°C below ambient temperature.



MULTIFLEX CARRIER

The Multiflex Carrier allows multiple combinations of modules on one base plate according to your needs. The Multiflex Carrier modules include:



MICROTITER PLATE



DEEPWELL



96/384-WELL PCR



PLATE STACKER



TIP STACKER



TUBE HOLDER



REFILLABLE REAGENT TROUGH



TILT MODULE

CLONACELL® MEDIA PRODUCTS

A COMPLETE LINE OF MEDIA PRODUCTS FOR RAPID CELL LINE GENERATION



MEDIA FOR HYBRIDOMA DEVELOPMENT

PRODUCT: ClonaCell®-HY Kit
CATALOG #: 03800 1 kit

The ClonaCell® -HY Kit is recommended for all steps of mouse monoclonal antibody production, from cell fusion, to selection and expansion of desired hybridoma clones. This kit contains enough media for one fusion experiment. The selection and cloning step is performed in a methylcellulose-based semi-solid medium. This kit can also be used for rat hybridoma production.

The kit includes one bottle of each: ClonaCell®-HY Medium A, B, C, D, E and ClonaCell®-HY PEG.

MEDIUM FOR TRANSFECTED CELL SELECTION

PRODUCT: ClonaCell®-TCS Medium
CATALOG #: 03814 80 mL

The ClonaCell® -TCS Medium is a semi-solid medium recommended for the one-step selection and cloning of transfected cell lines.

The medium contains methylcellulose, pre-selected FBS, and does not contain a selective agent.

CHEMICALLY DEFINED MEDIUM FOR CHO CELL SELECTION

PRODUCT: ClonaCell®-CHO CD Medium
CATALOG #: 03815 90 mL

The ClonaCell®-CHO CD is a completely chemically defined, protein-free and methylcellulose-based semi-solid medium recommended for one-step selection and cloning of transfected suspension-adapted CHO cells.

The medium is chemically defined, protein-free, animal-component free, and does not contain a selective agent or L-glutamine.

ANIMAL COMPONENT-FREE MEDIUM FOR CHO CELL SELECTION



PRODUCT: ClonaCell® CHO ACF Medium
CATALOG #: 03816 90 mL

The ClonaCell®-CHO ACF is an animal-component free and methylcellulose-based semi-solid medium recommended for one-step selection and cloning of transfected suspension-adapted CHO cells.

The medium is animal-component free and does not contain a selective agent or L-glutamine.

CLONACELL® CUSTOM MEDIUM

PRODUCT: ClonaCell® Custom Medium
CATALOG #: 03899

Custom formulations of ClonaCell® are available to meet individual research needs for the selection and cloning of mammalian cells. Components added to methylcellulose can include any desired base medium, specific serum or serum-substitute, growth factors, and/or other pre-selected components.

THE CELL EXPERTS™ | WWW.STEMCELL.COM

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