

Cell Culture Made Simple

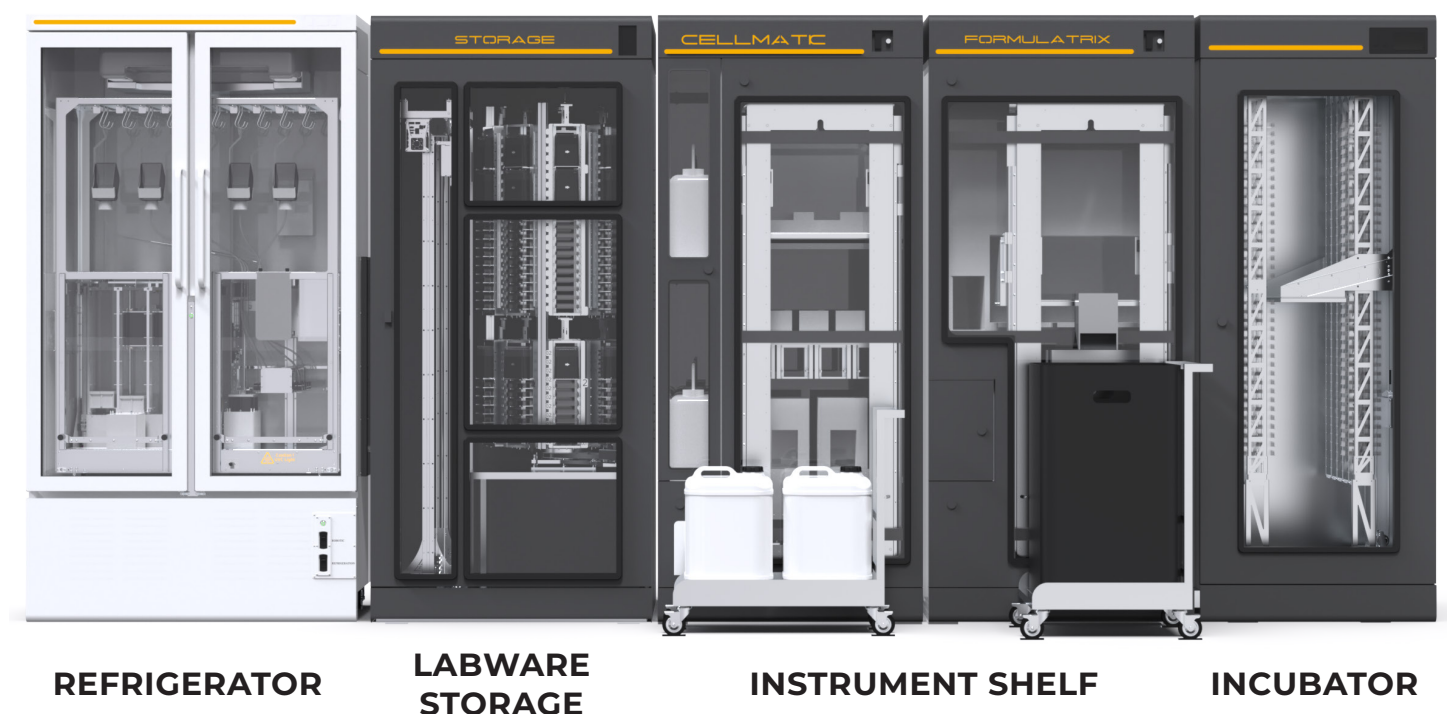
Formulatrix Automated Cell Culture Portfolio

Formulatrix cell culture solutions combine intelligent automation with advanced liquid handling and imaging technologies to simplify complex cell workflows. From precise reagent exchanges to fully automated cell maintenance, our systems are designed to reduce manual effort, minimize variability, and support long-term, high-throughput experiments. Whether you're performing routine media changes or managing differentiation protocols, Formulatrix empowers researchers to achieve consistent, reliable results with minimal hands-on time.



Cellmatic™ - Automated Cell Culture System

The Cellmatic is a fully automated cell culture system that handles experiments from start to finish. The system performs media exchanges, daily imaging, and scheduled or confluency-based passaging using advanced liquid handling. With built-in cell counting, optional centrifuge integration, and robust scheduling software, the system supports complex cell protocols—enhancing lab efficiency, precision, and long-term differentiation workflows with minimal user intervention.



Advanced Technology Integrated into Every Subsystem

- 400 plate capacity incubator with CO₂, temperature, and humidity controls
- 4°C refrigerator stores up to 12 base media and 50 specialized reagents for up to 2-3 weeks of run time
- Smart liquid handling with the FLO i8® PD, ensuring minimal waste and cost
- Ultra-fast reagent exchanger for feeding plates and plating cells into high-throughput multi-well plates
- The confluency reader captures images of the entire 96-well plate in < 3 mins
- Rover® Autonomous Plate Handlers carry plates to and from subsystems
- Contamination minimized by HEPA-filtered, positively pressurized access points
- The entire system can be sterilized with Vaporized Hydrogen Peroxide (VHP)

Key Features:

Fully Automated Cell Culture Workflow

Automates the entire cell culture process, including feeding, splitting, expansion, plating, and differentiation, allowing researchers to focus on science instead of manual labor

Integrated Smart Hardware

Dual liquid handlers, imager, storage, refrigerator, and incubator—seamlessly unified for automated cell culture using Formulatrix's scheduling software and device drivers

High-Capacity Plate Handling

Supports up to 400 SBS-sized plates (1- to 384-well formats), enabling parallel processing of multiple cell lines and high-throughput experiments

Intelligent Scheduling and Parallel Processing

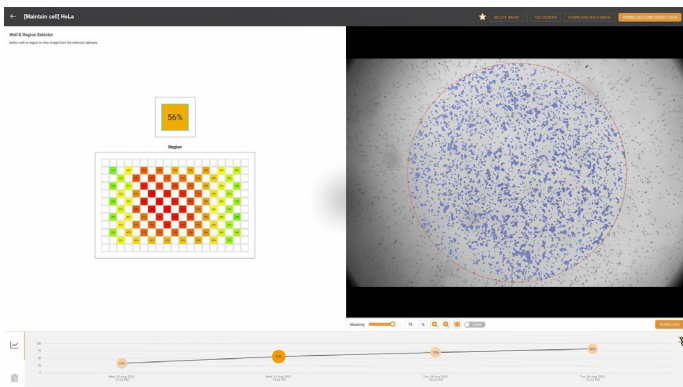
Advanced scheduler allows multiple users and protocols to run simultaneously, automatically interweaving tasks without scripting or programming

Versatile Application Support

Handles a broad range of workflows including stem cell differentiation, cell line development, high-throughput plating, permeability assays, and more — all on a single platform



Automated Reservoir Filling in the Refrigerator



Tracking Cell Growth via Confluency Image Analysis

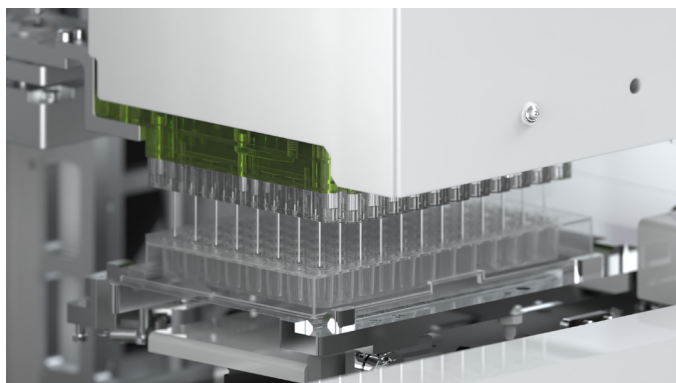
Why Choose Cellmatic?

- **Space-Efficient Design:** Integrated labware storage and refrigeration with a small footprint
- **Robust Support:** Hardware and software built by Formulatrix®, with continuous updates
- **Off-the-Shelf Ready:** No custom engineering required — reliable, scalable solution
- **Unified Software & Hardware:** Seamless integration with no driver issues

Reagent Exchanger - Automated Plate Washer

The Reagent Exchanger (RX) is a versatile automated plate washer designed to support a wide range of microplate formats and complex laboratory workflows. It features integrated automation for delidding, plate tilting, dispensing, aspiration, and nozzle cleaning—delivering streamlined, unattended operation. The RX easily integrates with automation platforms and supports robotic reagent loading to maximize efficiency and consistency.

- **High-Throughput, 96-Channel Aspirator Head:** Integrated labware storage and refrigeration with a small footprint
- **Tilting Plate Stage:** Enables liquid pooling to optimize aspiration efficiency
- **Non-Contact Side-Wall Dispensing:** Minimizes fluid shear, preserving the integrity of loosely adherent cells
- **Cell Plating:** Cells are consistently dispensed into 96- and 384-well plates by maintaining suspension with a stir bar
- **Self-Cleaning System:** Integrated wash stations ensure reusable aspirator and dispenser nozzles remain contamination-free



96-tip Head Rapidly Exchanges Reagents

- **Interchangeable Troughs:** Easily swap reagent reservoirs for flexible, multi-reagent dispensing. Versatile loading options support both automatic and manual loading for seamless operation
- **Multiple External Liquid Connections:** Supports five external connections, including waste, three wash liquids, and a direct plumbed dispense source for continuous operation
- **Integrated Delidder:** Compatible with lidded microplates

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