

CORe™ Cell Culture System

MEET THE UPSIDE OF DOWNSIZING

Culture Optimization Reactor - A mini bioreactor with the capabilities of larger systems, with a much lower operating cost and footprint

- Customizable single-use bioreactor vessel, free of interfering inserts and probes
- Quick and easy set-up
- Operational control driven through on-board interface



- Multiple pump options allow high level of operational control and experimental flexibility
- Ideal for stem cell research and development, including cell and tissue culture and excellent for educational applications
- Supports batch, fed batch and continuous culture applications

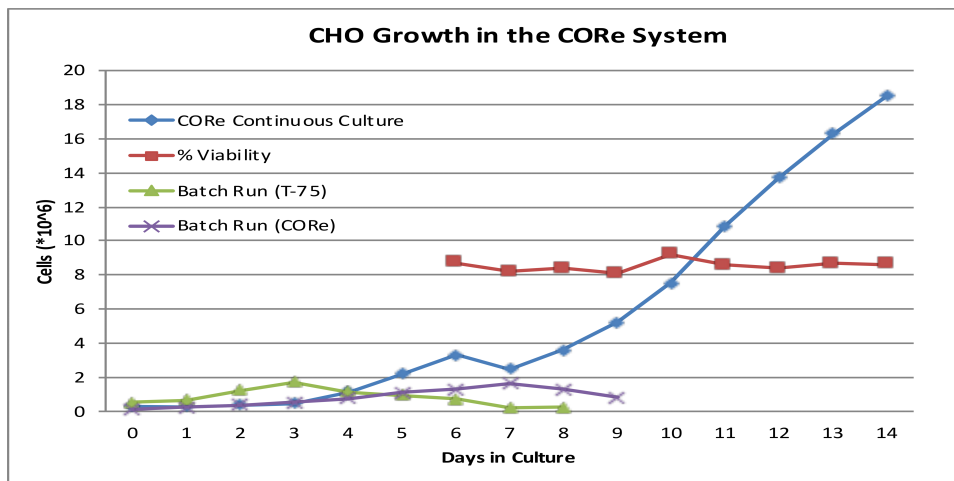
CORe™ Cell Culture System

Key Features

- Reduced media consumption
- Single-use culture vessel, pre-sterilized and ready to use
- Non-intrusive sensors for pH, DO, level and temperature
- Compact, lightweight and portable
- Easily moved from bench to laminar flow safety hood
- Touch-screen user interface
- Customizable options:
 - configurable vessel port
 - pumps arrangement
 - gas addition options
 - impeller configuration
- Data acquisition through USB and Ethernet
- OPC UA compatible

Applications

- Research and development
- Process Development
- Seed Development
- Stem cell and tissue culture
- Educational



CHO cell growth in the CORe™ System was compared to batch growth in a “T-75” flask. In all cases the cultures were similarly grown in CDM4CHO. The CORe continuous culture feed rate (0.5-1.5 VV/D) was maintained with a filtration based cell separation device. Start Concentrations [Cellx10⁶]: CORe Continuous [0.29], CORe Batch [0.12], T-75 [0.51]



Manage nutrient addition and subtraction with up to 8 pumps (optional configurations)



Single Use Bioreactor with configurable head plate port design for experimental flexibility

SPECIFICATIONS

Size: 4.2 x 8.0 x 13.3 in (10.6 x 20.3 x 34 cm)

Weight: 2.5 lbs (1.14kg)

Power: 100 to 240 volts, 50 to 60 Hz

Access Ports: 8 standard (6 on headplate, 2 on vessel skirt)

Pumps: 4 standard, option for 8

Four gas control: CO₂, O₂, N₂, Air

Vessel Working Volume: 35 to 100ml

Vessel Volume: 35–100mL

Temperature Control: +/- 0.20° C

pH: optical sensor, range 5.5 - 8.5

Dissolved Oxygen (% Air Sat.): optical sensor, set range 0–100%

Agitation: 10 to 300 RPM (customizable)

Data: USB, Ethernet, OPC UA compatible

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