

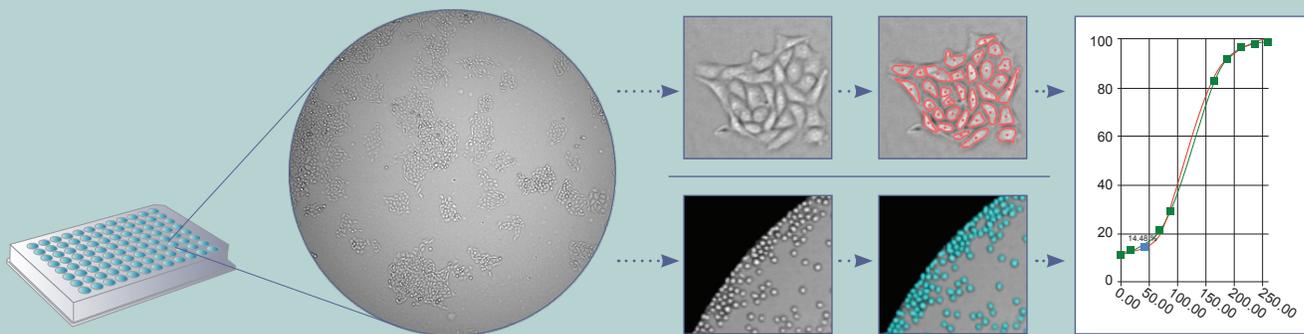
# Image Cytometer for Adherent & Suspension Cells



## Adherent cells

- Brightfield imaging and cell counting without trypsinization
- Non destructive, label free cytotoxicity assay
- Growth curve from the same well over multiple days

1. IMAGE entire plate → 2. ANALYZE cell images → 3. RESULTS data curves & cell images



**Cell Culture** Cell Counting, Confluence, Growth Tracking, Cell Line Generation, Single Cell Detection, Colony Counting, Transfection Efficiency

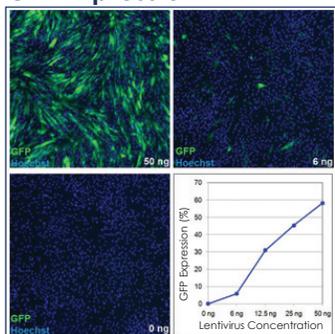
**Example Assays** Apoptosis, Cell Cycle, Cell Health, Cell Viability, Cytotoxicity, DNA Synthesis, Cell Morphology, Spheroid Analysis, Migration / Invasion Assay, Wound Healing, Expression Analysis, Cell Proliferation, Killing Assays

**High Throughput Screening** Robotic Integration, Cell Health, Proliferation, Fluorescent Assays, Tumorspheres

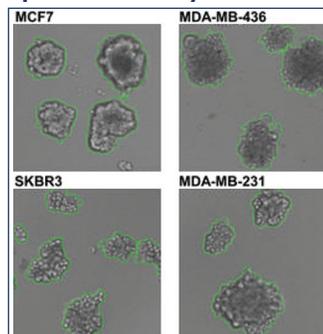
**Stem Cell Research** iPS Cell Line Generation, Embryoid Body Morphology, Stem Cell Marker, Primary Cell Monitoring, Colony Counting

**Bio-Production** Cell Secretion, Cell Line Monitoring, Routine Quality Controls

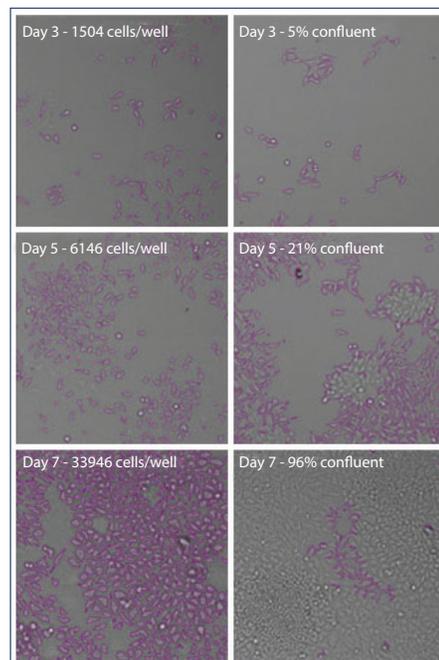
## GFP Expression



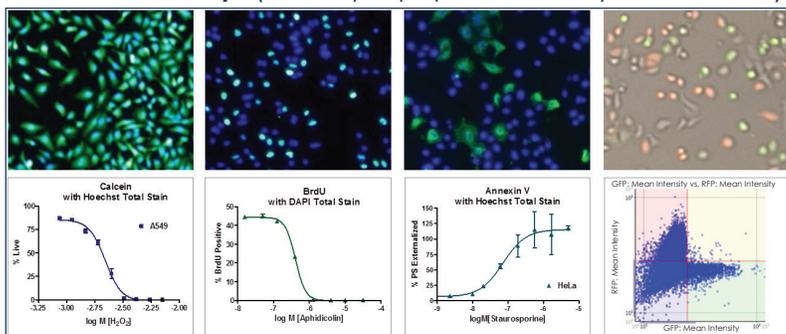
## Spheroid Analysis



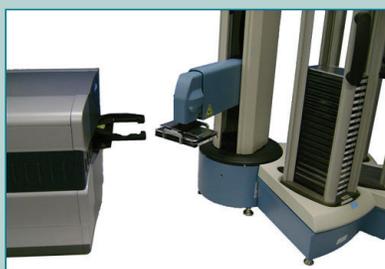
## Cell Growth



## Fluorescent Assays (Viability, Apoptosis, Cell Cycle, GFP/RFP)



## Features and Benefits



- Increased speed for image acquisition and data processing
- Uniform high contrast and even illumination allows identification of "every cell in every well" with no edge effects
- Best-in-class brightfield mode permits label-free live cell assays
- 4 fluorescent channels allow multiplexed assays
- Proprietary optics provide high resolution images (1  $\mu\text{m}$  / pixel) with minimum plate movement ensuring minimal sample disturbance
- Multiple focus modes to support many plate types
- Powerful, easy-to-use software reduces need for specialized users
- Automation interface for robotic integration enables 24/7 Celigo use
- Simultaneous data acquisition and analysis for high throughput applications
- Rapid image capture and processing allowing imaging and analysis of over 150,000 wells per day
- Proven performance with a wide range of adherent and non-adherent cell types

Celigo S advanced optics, sophisticated software and improved performance provide:

### Plate Compatibility

6, 12, 24, 48, 96, 384, 1536 well plates (black, white and clear well plates) / T-25 and T-75 flasks. Slides and cell array plate profiles available upon request

Plate	Typical Time
1536-well plate	<6min
384-well plate	<2min
96-well plate	<3.5min

2  $\mu\text{m}$  / pixel resolution results. Faster times available at other resolutions

### Software

Powerful analysis software running under Windows 7

### Illumination / Optics

- 1 LED-based enhanced brightfield imaging channel with uniform well illumination
- 4 LED-based fluorescent channels
- Proprietary F-theta lens with superior well edge-to-edge contrast
- Large chip CCD camera (2024 x 2024 pixels)
- 1  $\mu\text{m}$ /pixel resolution (choice of 1, 2, 4, 8  $\mu\text{m}$ /pixel)

### Fluorescent Channels

Channel	Excitation	Dichroic	Emission	Example Dyes
Blue	377/50	409	470/22	Hoechst, DAPI
Green	483/32	506	536/40	FITC, Calcein, GFP, Alexa Fluor® 488
Red	531/40	593	629/53	R-PE, PI, Texas Red, Alexa Fluor® 568
Far-Red	628/40	660	688/31	DRAQ5®, Alexa Fluor® 647

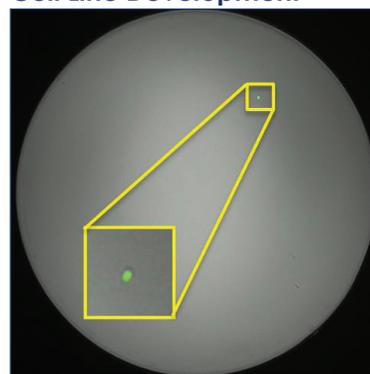
### Dimensions

19" x 25" x 20" (48 cm x 64 cm x 51 cm), 117 lb. (53 kg)

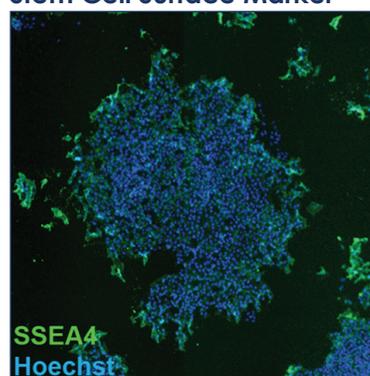
### Facilities

110-220 VAC 50-60 Hz

## Cell Line Development



## Stem Cell Surface Marker



**Cellometer®**  
Simply Counted

**Celigo® S**  
Image Cytometer

## Request a Demo!

Sign-up for an online demonstration by an Applications Specialist.

**Call or email to sign up.**  
**Mention Celigo.**

E-mail [info@nexcelom.com](mailto:info@nexcelom.com)  
or call **978-327-5340**