Celigo™ Adherent Cell Cytometer

Synopsis

The Celigo™ adherent cell cytometer enables *in situ* brightfield and fluorescent analysis of adherent cells with minimal sample manipulation. The system measures multiple cell-based parameters providing significant flexibility.

Benefits

- Analyze cell cultures *in situ*, with minimal disturbance
- Eliminate enzymatic disruption of sample during preparation procedures
- Image cells in brightfield and fluorescence on the same platform
- Analyze every cell in every well in brightfield mode with no 'edge effect'

Applications

Brightfield Label-Free Assays for Live Cells

- Cell counting for adherent cells and for non-adherent cells
- Cell growth tracking
- Colony counting

Fluorescence Assays

- Cell counting
- Cell viability (toxicity)
- DNA synthesis (cell proliferation)
- PS externalization (apoptosis)

Cell Secretion Assay

- Measurement of antibody secretion from individual cells

Specifications

Cellular Analysis Parameters	Total Cell Number (all cells)
	Gated Cell Number (cells within user specified gates)
	Average Cell Density (cells/well)
	Average Cell Area Density (cells/cm^2)
	Average Cell Diameter (µm)
	Average Cell Area (µm^2)
	Average Cell Perimeter (µm)
Detection Modes	LED-based enhanced brightfield imaging with uniform illumination across well
	LED-based fluorescent imaging with 3 excitation filters and 3 emission filters

System Specifications page 2

Plate Formats

384, 96, 24, 12, 6 well plates (coming soon 1536 well plates)

T-25 and T-75 flasks

Plate Scan Time

As little as 5 - 15 min across a range of microplate formats

Magnification

3.5x magnification (1 µm/pixel; 0.25 NA)

Fluorescence Detection Range

3 excitation filters and 3 emission filters, to allow for 1, 2, or 3 channels of fluorescence data. Multiple channels of image data can be a combination of brightfield and fluorescence, which will allow 3 fluorescence and 1 brightfield channels.

Fluorescence wavelengths available

Channel	*Excitation*	*Emission*	*Example Dyes*
1	377	447	Hoechst, DAPI
2	483	536	FITC, Calcein, Alexa 488
3	531	629	PI, Texas Red, Alexa 568

Computer Hardware

Dell Precision T3500 or similar

Software Output

Image export file format: TIFF

Image format for database storage: JPEG 2000

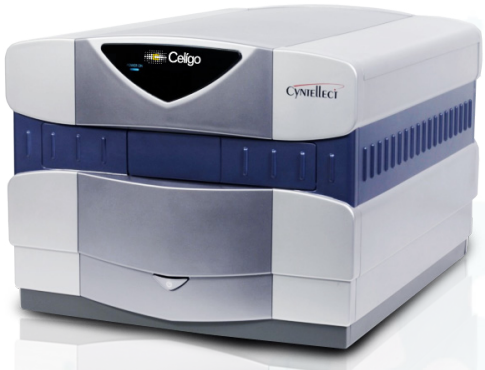
Dimensions

Enclosure Dimensions: 19"x 25"x 20"
(48 cm x 64 cm x 51 cm)

Weight: 117 lb (53 kg)

Power Requirements

110-220 VAC 50-60 Hz



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