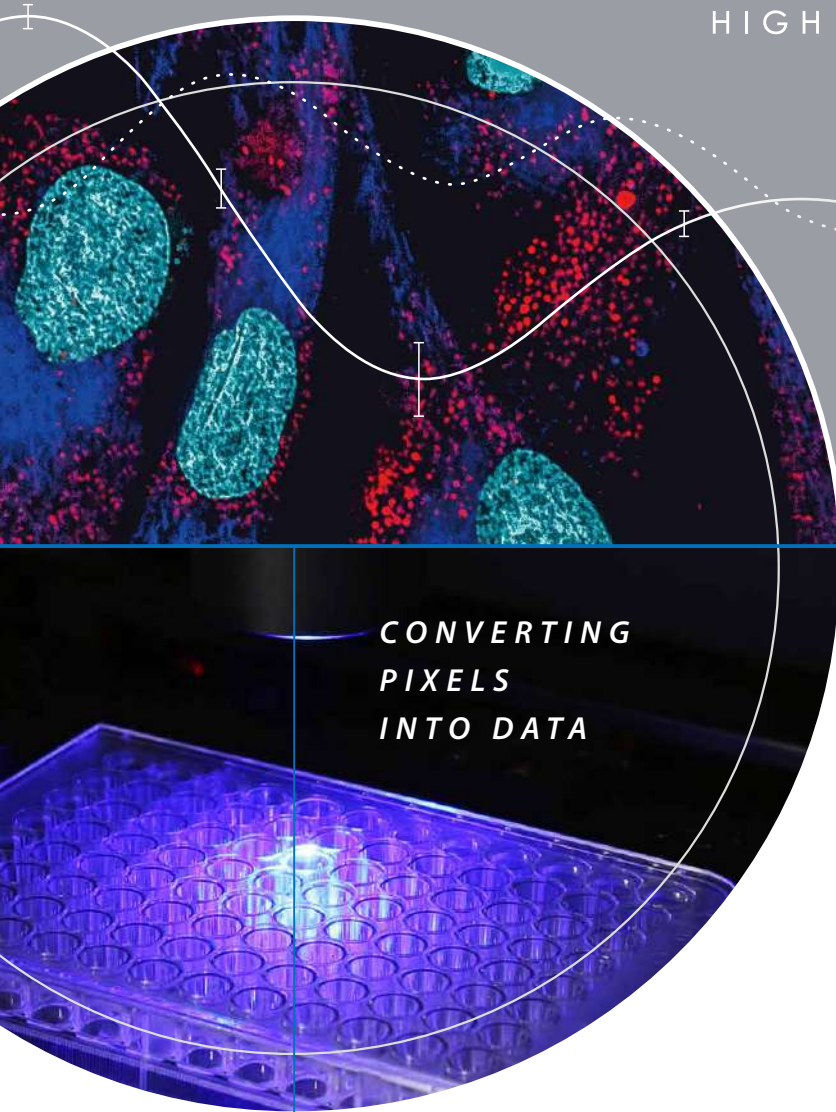


CELENA[®]X

HIGH CONTENT IMAGING SYSTEM





THE COMPLETE SOLUTION
TO HIGH CONTENT IMAGING
AND ANALYSIS

THE CELENA[®] X HIGH CONTENT IMAGING SYSTEM

Say hello to the all-new CELENA[®] X High Content Imaging System, the most affordable solution for rapid high content image acquisition and analysis. Customizable imaging protocols, image-based and laser autofocusing modules, and a motorized XYZ stage simplify well plate imaging and slide scanning. Powerful and flexible software allows you to set up advanced image analysis sequences that can be used to quantitatively analyze numerous cellular features for the simplest fixed cell assays to more complicated, time-lapse live cell assays. With the power to capture and quantify cellular information in both fixed and live cells, the CELENA[®] X is a valuable tool for life science research as well as drug discovery and development.

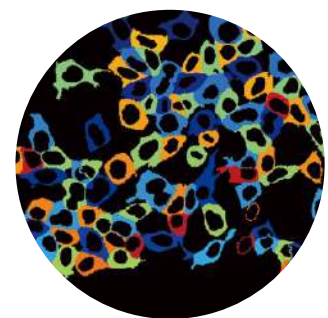
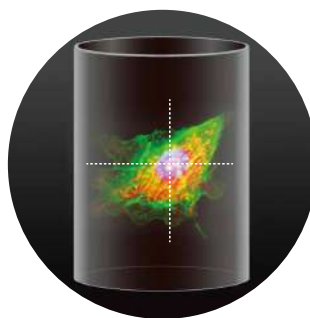
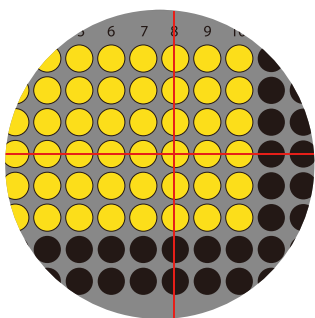


Image acquisition

Image analysis

Data analysis

AUTOMATED KINETIC LIVE CELL ASSAYS

The CELENA®X is a fully automated digital imaging system that makes it easy to set up a time lapse imaging sequence for lengthy cell-based assays. Compatible with onstage incubation systems, a wide variety of experiments in physiological and non-physiological conditions can be performed and captured. The fully automated system will automatically focus in on and capture each specified field in each specified well with the preset imaging conditions.

EXPLORE AND ANALYZE

CELENA®X Explorer is the intuitive and easy-to-use interface for the sophisticated CELENA®X. Even scientists new to imaging can set up automated high-content imaging experiments with ease. Images can be processed and analyzed using CELENA®X Cell Analyzer software to produce statistically robust data.

DIGITAL HIGH CONTENT IMAGING AT ITS FINEST



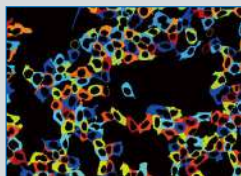
Fully automated plate and slide imaging

- Ideal for kinetic live cell assays, fixed cell assays, and slide scanning
- Motorized XYZ stage, filter cube stage, and objective turret



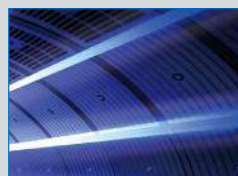
Interchangeable filter cubes and objectives

- Hard-coated LED fluorescence filters
- Compatible with Olympus and Zeiss objectives



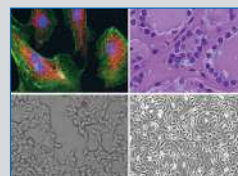
Powerful, easy-to-use user interface

- Simple setup of acquisition channels and parameters
- Seamless integration of imaging and data analysis processes



Laser autofocus

- Rapid and reproducible focusing
- Minimized phototoxicity and photobleaching



Versatile imaging modes

- Four-channel fluorescence, brightfield, color brightfield, and phase contrast imaging
- Z-stack and time lapse capabilities



RELEVANT AND REPRODUCIBLE HIGH CONTENT ANALYSIS WITH CELENA[®] X CELL ANALYZER

With the CELENA[®]X, image capture and analysis are integrated seamlessly. The powerful and flexible CELENA[®]X Cell Analyzer allows for the creation and customization of workflows that can be used for the simplest fixed cell assays to more complicated kinetic live cell assays. Cell Analyzer also provides tools to edit and annotate images as well as create videos.

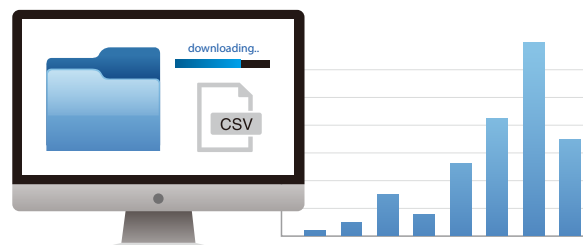
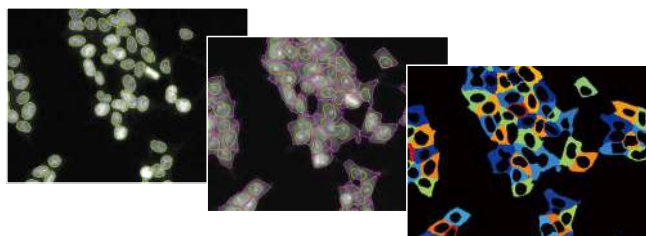


Image analysis

Image processing, object identification, measurements

Data analysis

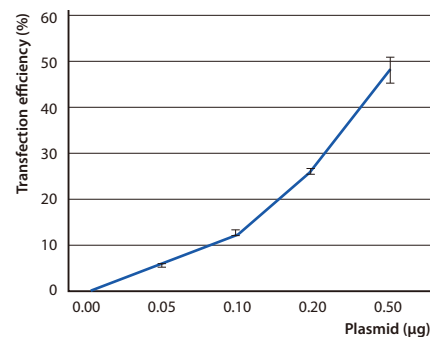
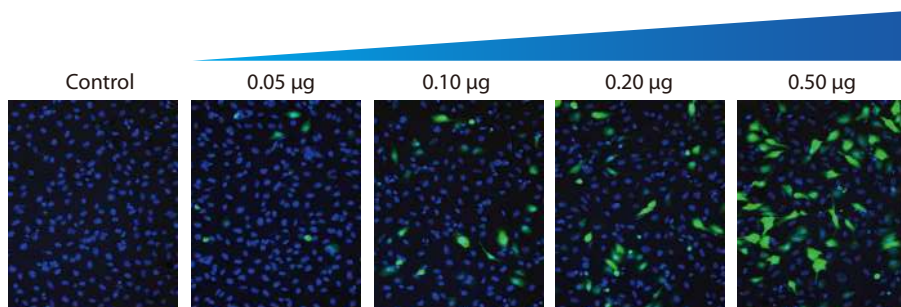
Analyzed images, result files, graphs (coming soon)

CREATE YOUR OWN HIGH CONTENT ANALYSIS WORKFLOWS

Using Cell Analyzer, users can create an image analysis pipeline, which is a sequence of modules that each perform a specific image processing task. This allows the quantitative analysis of multiple cellular features from biological images. Modules can be mixed, matched, and adjusted to measure phenotypes of interest objectively, quantitatively, and reproducibly. Once a pipeline has been established, it can be used to analyze subsequent projects.

QUANTIFY CELLULAR PHENOTYPES ANYWHERE

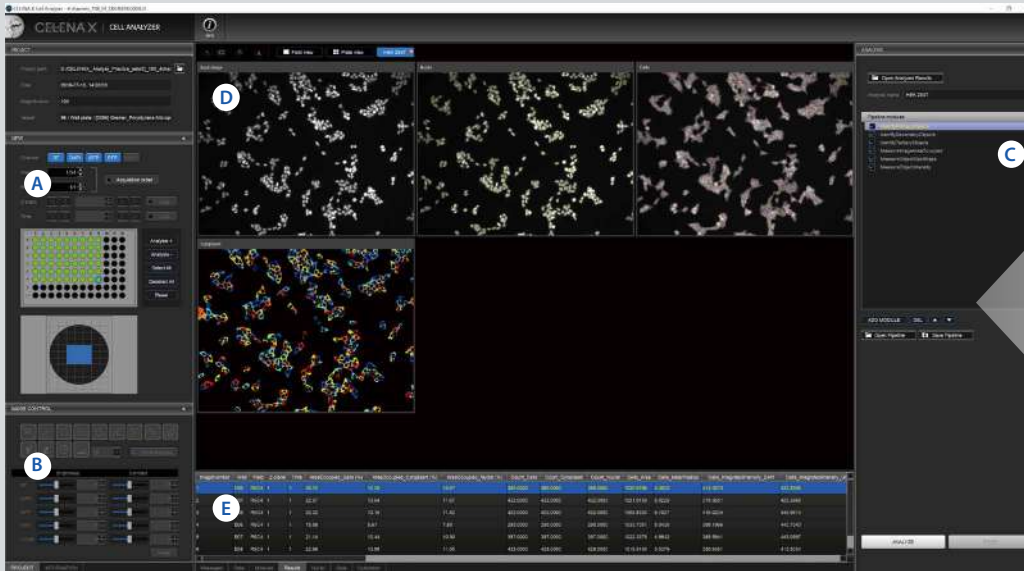
Go straight from imaging to analysis on the CELENA[®] X or analyze your data at your desk. CELENA[®]X Cell Analyzer can be installed onto and used on a remote PC for your convenience.



Quantifying the effects of plasmid concentration on transfection efficiency with the CELENA[®] X.

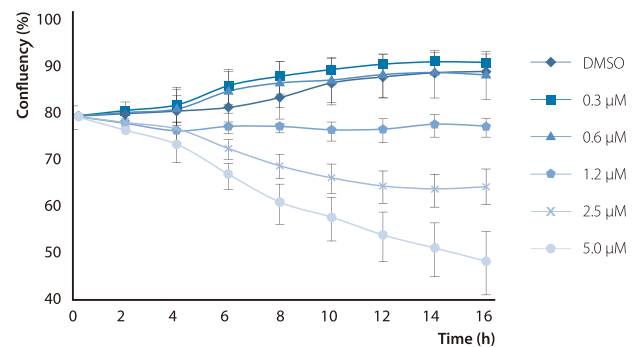
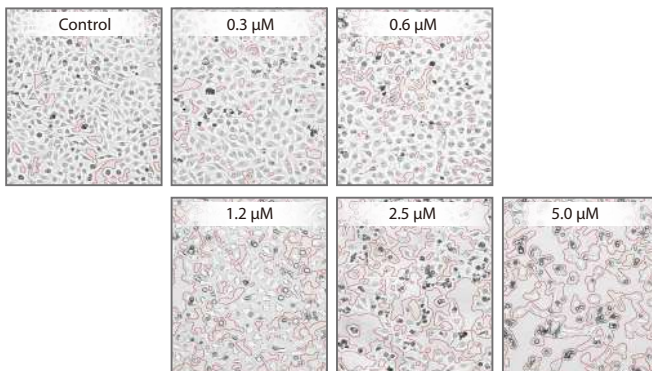
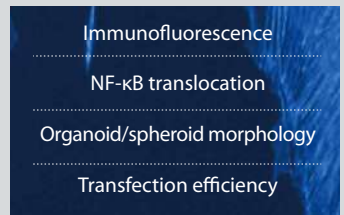
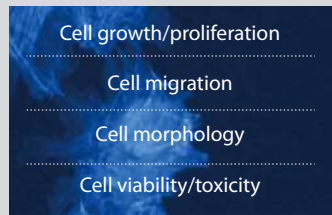
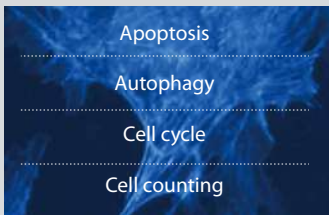
HeLa cells were transfected with varying concentrations of the GFP-Q103-Htt plasmid (0.05, 0.10, 0.20, and 0.50 µg/well of a 96-well plate), stained with DAPI, and imaged 16 hours post-transfection. CELENA[®] X Cell Analyzer makes it easy for scientists to analyze transfection efficiency.

WORKFLOW-BASED USER INTERFACE MAKES IT EASY TO PUT TOGETHER ANALYSIS MODULES FOR HIGH CONTENT ANALYSIS.



- (A) Simple vessel navigation
- (B) Annotation and measurement tools
- (C) Intuitive image analysis pipeline creation
- (D) Analyzed images
- (E) Results

ABUNDANT APPLICATIONS



Evaluating the cytotoxic effects of Camptothecin on HeLa cells with the CELENA[®] X.

Confluent HeLa cells were treated with varying doses of Camptothecin (CPT) at 2 hour intervals for 6 hours and subsequently imaged to determine how CPT concentration affects cell viability. CELENA[®]X Cell Analyzer was used to measure the confluency of cells in a multi-well plate in a rapid, reproducible, and quantifiable manner.

VERSATILE AND CUSTOMIZABLE FOR YOUR CELL IMAGING NEEDS

CX30000

CELENA® X High Content Imaging System

- CELENA® X Controller
- External PC
- Microplate Holder
- CELENA® X Cell Analyzer Verification Key
- Universal Vessel Holder
- Single Slide Holder



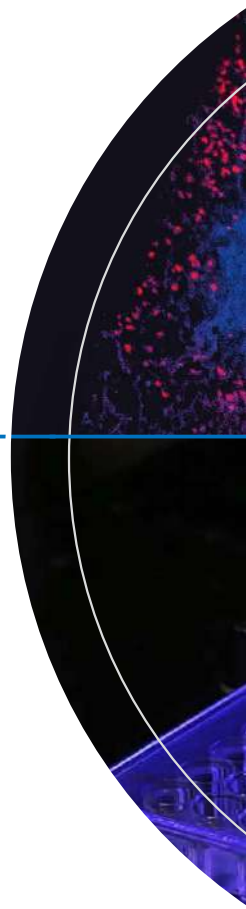
- Camera**
 - CX30200 Monochrome Camera Module
 - CX30201 Dual Camera Module
- Condenser**
 - CX30300 Phase Condenser
 - CX30301 Brightfield Condenser
- AF module**
 - CX30400 Image-based AF
 - CX30401 Laser AF Module

SPECIFICATIONS

Supported labware	Slides, multi-well plates (6 to 1536 wells), petri dishes, culture flasks
Imaging modes	4-channel fluorescence, brightfield, phase contrast, color brightfield
Light source	High-power LED filter cubes with adjustable intensity (>50,000 hours per filter cube)
Filter cube stage	Motorized; 4 interchangeable fluorescence filter cubes and 1 brightfield filter cube
Available filters	DAPI, EGFP, RFP, mCherry, ECFP, EYFP, DSRRed, Cy5, Cy7, Cy3/TRITC Long Pass, GFP Long Pass, Cy5 Long Pass, custom filters
Objective turret	Motorized; 5 interchangeable objectives
Compatible objectives	1.25-100X; Olympus, Zeiss, and Logos Biosystems objectives
Condenser	Motorized; basic or phase contrast
	Basic: 60 mm LWD condenser, 4 positions
	Phase contrast: 60 mm LWD condenser, 4 positions with 3 phase annuli
Camera	Monochrome: CMOS, 1.92 MP
	(optional) Color: CMOS, 1.92 MP
Image outputs	Monochrome: 16-bit (12-bit dynamic range) TIF, PNG, or JPG
	Color: 24-bit color TIF, PNG, or JPG
	Movies: MP4
Autofocus method	Image-based autofocus
	(optional) Laser autofocus
Stage	Motorized X/Y-stage (120 mm x 80 mm); motorized Z-stage (10 mm)
Stage control	CELENA® X Explorer
	(optional) Joystick
Computer	External PC
Monitor	27" 4K UHD monitor
Software	User interface: CELENA® X Explorer
	Analysis: CELENA® X Cell Analyzer
Power	100-240 VAC, 250 W, 50/60 Hz
Dimensions	Main body: 39 x 46 x 50 cm (15.4 x 18.1 x 19.7 in)
	Controller: 17 x 30 x 23 cm (6.7 x 11.8 x 9.1 in)
Weight	Main body: 33 kg (72.8 lbs)
	Controller: 7 kg (15.4 lbs)

FOR RESEARCH USE ONLY. NOT FOR THERAPEUTIC OR DIAGNOSTIC USE.

CELENA X | HIGH CONTENT IMAGING SYSTEM



www.logosbio.com

LBSM-RD-BR-CLX-002

HEADQUARTERS	USA	EUROPE
FL 3 28 Simindaero 327beon-gil, Dongan-gu Anyang-si, Gyeonggi-do 14055 South Korea	7700 Little River Turnpike STE 207 Annandale, VA 22003 USA	1 allée Lavoisier 59650 Villeneuve d'Ascq France
Tel : +82 (31) 478-4185 Fax : +82 (31) 360-4277 E-mail : info@logosbio.com	Tel : +1 (703) 622-4660, +1 (703) 942-8867 Fax : +1 (571) 266-3925 E-mail : info-usa@logosbio.com	Tel : +33 (0)3 74 09 44 35 Fax : +33 (0)3 59 35 01 98 E-mail : info-france@logosbio.com