

Overview & Introduction

Automatic Live Cell Imaging System _ Celloger Mini





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Celloger Mini of CURIOSIS





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Table of Contents

¹ Introduction

- 2 Why live cell imaging system?
- **3** Applications
- 4 Key features
- 5 User-friendly
- 6 How does it work
- 7 Comparison table



Live cell imaging is the study of living cells using time-lapse microscopy.

It is used by scientists to verify cell to cell interactions, understanding of biological function through the research of cellular dynamics.

- ✓ Observation of live cells in real time
- ✓ Enabling precise image capture of cells
- ✓ Quantifying cell movement
- ✓ Cell culture QC



Market position



The target position of Celloger Mini

A graph showing the price and performance of a live cell imaging system. Celloger Mini targets "one device in one laboratory" with better performance and competitive price compared to bright field based third-party products, rather than to high-end instruments, including various applications and fluorescent-based





Celloger Mini is an auto-mated live cell Imaging system based on a brightfield microscopy technique. Special treatment applied to the surface of Celloger Mini to withstand the temperature and humidity, so it is compatible with CO2 incubators.

Wound healing(scratch) assay

Live cell monitoring

Cell growth curve & confluency





1. Automatic XY stage

With equipped XY stage, enables to use of 96 well plates and multiple points are available in one plate. Also, various well plates, dish and flask are available and even other types of vessels depending on the user because the XY stage covers two-dimension.







2. Cell monitoring

By monitoring, various type of cell morphology can be observed in real-time for about two weeks long.

In addition to capturing, images can also be made into a video, allowing users to view cell changes.





1. Compact size

Compact size makes it straightforward to install and handle, so the maintenance is not complicated. Also practical for space utilization in incubators. The availability of multiple units has the advantage of using a sample comparison or a variety of samples.

Celloger Mini



Competitors





2. User software(1)

The provided software allows the user to set the location that will be detected, scheduling to determine how long the test should be performed at which interval, and analysis function to observe the shape or change of cells through the stored images.



Positioning

Scheduling



Analyzing



Cell line : HeLa

confluency & growth curve

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2. User software(2)

Accurate diagnosis is possible because the change in temperature and humidity can be observed in real time, and there is a ruler that can measure the size of the cell with the distance in the vertical, horizontal and diagonal directions.



Measure cell length





STEP 1. Prepare

Cell Seeding Prepare a sample

STEP 2. Start

 \rightarrow

Check the cell growth

Settle down the cells and start growing.



STEP 3. Analysis

Data analysis

Check the cells and analysis the confluence with Celloger Mini



STEP 4. Result

Video

Analyze cells as desired, select and save data format

Result Data





Time lapse images





Exporting data

- Saving image format : PNG, JPG, TIFF
- Video recording format : AVI







Comparison table

Manufacturer	CURIOSIS	NIKON	LONZA	INNOME	BioTek	Sartorius
Product	Celloger Mini	BioStudio-T	CytoSmart2	ZENCELL OWL	Lionheart FX	Incucyte S3
Image						
Dimensions	195(W)x305(D)x190(H)	300(W)x 345(D)x 345(H)	90(W)x133(D)x100(H)	180(W)x180(D)x105(H)	455(W)x465(D)x358(H)	450(W)x478(D)x320(H)
Automatic stage	ο	х	х	x	0	х
Focusing	Auto	Auto	Manual	Manual	Auto	Auto
Magnification	4x / 10x	4x / 10x	10x	10x	4x ~ 100x	4x / 10x / 20x
Image size	High: 5MP Normal: 1.25MP	1.3MP	0.9MP	5MP	1.25MP	1.7MP
Field of view	1.3x1.0 mm (4x)	1.69x1.35mm (4x)	2.40x1.40 mm	1.2x0.9 mm	-	4.34 x 3.25 mm (4x)
Exported formats	TIFF/JPEG/PNG/AVI	TIFF/JPEG/BMP	JPEG/AVI	JPEG/BMP/PNG	TIFF/JPG/BMP/PNG/ EMF/GIF/MP4/WMV	JPEG/PNG/TIFF/WMV AVI/MPEG-4
End user price	\$19,500	\$67,400	\$13,000	\$23,050	\$84,000	\$302,522