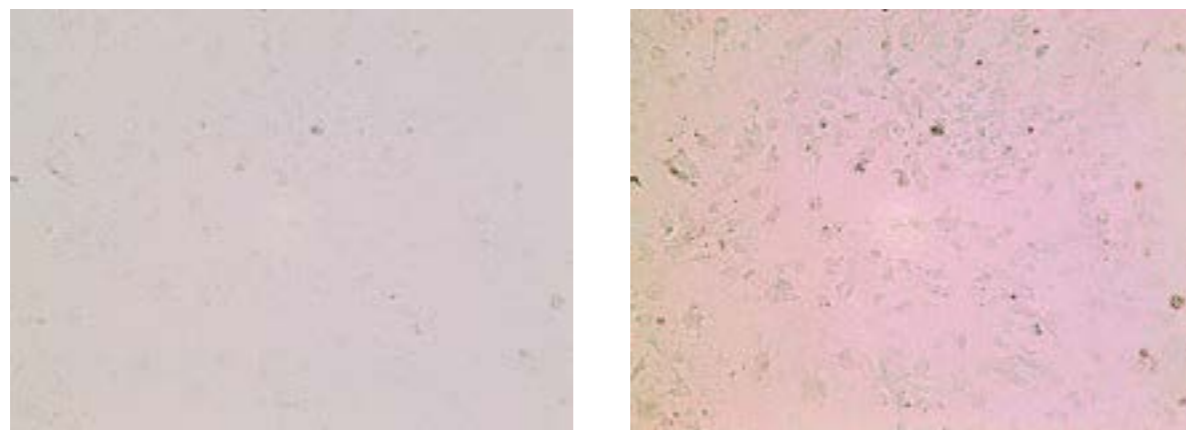


Contrast adjustment

Auto-contrast adjusting function of control software, ImageSaver6 .



Before contrast adjustment

Auto-contrast adjusted image

Specifications

Name	WSL-1800 CytoWatcher
Camera	5M Pixels Color CMOS
Resolution	2592 × 1944 pixels
Object Lens	4x
Focusing	Manual adjustment
Field of view	1.425mm × 1.070mm
Light source	White LED
Moisture Resistant	Usable humidity 95%RH (Usable in CO2 incubator)
Control Software	ImageSaver6 for Windows Detection method: Live/Still image/Time lapsed Save file: 8bit TIFF/JPEG/BMP (Color/Monochrome)
PC connection	USB 3.0 (Monitor resolution is needed more than 1024 × 768) Cable length 0.8m(80cm)
OS	Windows10/8.1/7 64bit/32bit
Size/Weight	130mm(W)x 180mm(D)x 190mm(H)/2.5kg
Power	USB(bus power),DC5V

*Extension USB cable 'No.3601809 USB3.0 extension cable', Control PC, Control Software are optional.

Option

Code No.	Model	Main purpose	Quantity
3601809	USB3.0 extection cable	Cable extension	1
3601808	WSL-1800 Control PC	Control and save images	1
2110030	CS Analyzer version4 for Windows	Image processing,Video creation software	1
2140202	UP-X898MD thermal printer	Print images	1
2140913	UPP-110HG video printer paper, 10 rolls	印刷用紙	1

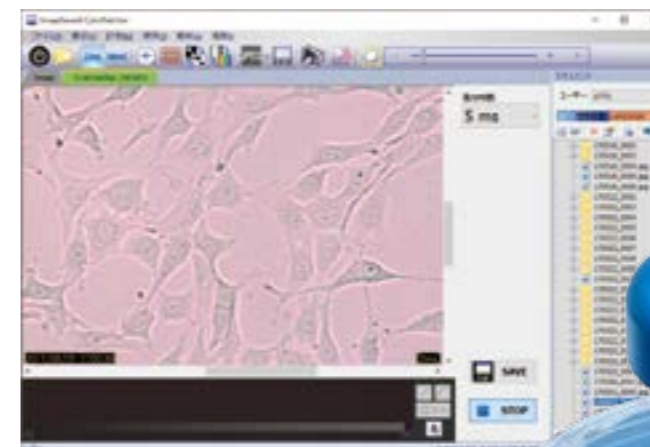
Time-lapse live cell imaging system

WSL-1800 *CytoWatcher*

Observation and image capturing of cultured cells in bright field.

Observation of dye-stained cells and tissue sections in the bright field.

Time-lapse image of cultured cells and tissue sections can be captured under culture environment.



Control software ImageSaver6



WSL-1800 CytoWatcher

Please check ATTO website for movies.

http://www.atto.co.jp/eng/products/livecell/Time-lapse_LiveCell_

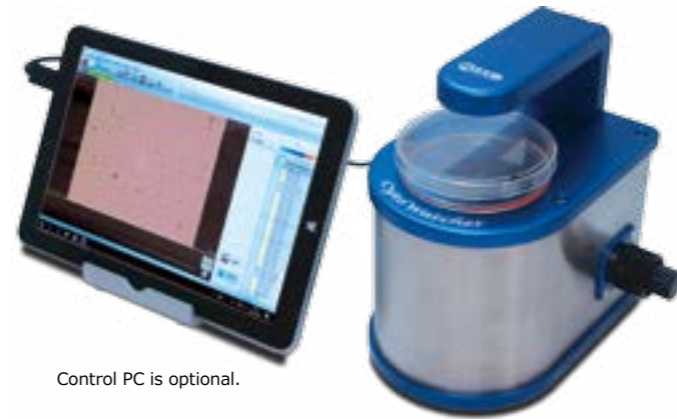


NewProduct Easy Cell Imaging System

WSL-1800 CytoWatcher

- To detect bright field images for cell, tissue and so on.
- Compact size, no stress to take space.
- CytoWatcher is moisture resistant and usable in CO₂ incubator.
- CytoWatcher is applied 5M pixels color digital camera with CMOS.
- Possible to time-lapse imaging under culture condition with easy operation.
- Laptop/tablet PC control, save images*

*USB 3.0 port is necessary.



Control PC is optional.

WSL-1800 CytoWatcher

Code No.	Model
3601800	WSL-1800 CytoWatcher

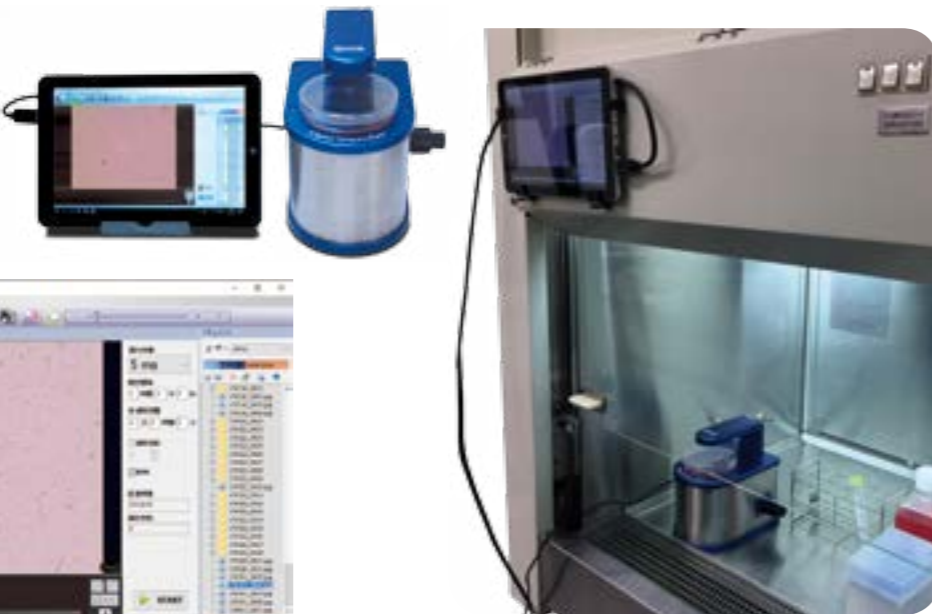
Set into CO₂ incubator

CytoWatcher is moisture resistance device, can be used under humidity 95%RH condition. Time lapse live cell imaging is available while culturing cell after setting in incubator. No need to use an expensive microscope stage culture system. Time lapse movies can be created with captured images by using optional CS Analyzer4 software.



Portable digital microscope

CytoWatcher is compact digital microscope, can be used in small areas such as lab bench or clean bench. It is convenient to carry around to work spaces.



Only to connect USB cable with PC

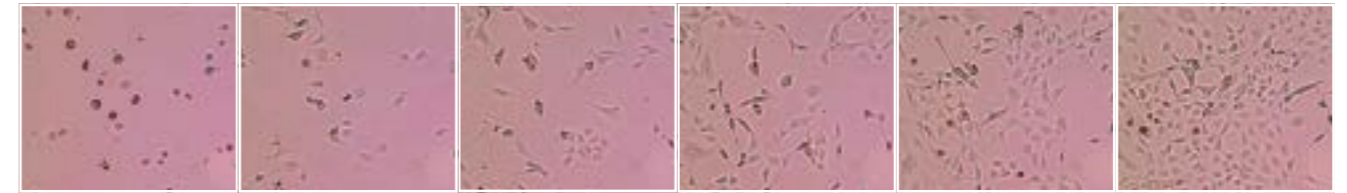
CytoWatcher is used with Windows PC (Optional) by connecting USB3.0. Laptop PC or Tablet PC is available. There is no power cable since PC supplies power through USB. Live Cell image can be seen just by running Image Saver6 after connecting to PC. Save images and time-lapse imaging can be operated easily.

Imaging data samples

Fibroblast cell cultivate observation by CytoWatcher

NIH3T3 cells (10 cm dish) were captured at 60-minute intervals for 60 hours after an hour passage in CO₂ Incubator. Followings are images captured every 12 hours.

00:00:00 → 12:00:00 → 24:00:00 → 36:00:00 → 48:00:00 → 60:00:00



Wound healing assay by CytoWatcher

Wound treatment on 100% confluent NIH3T3 cell layer (35 mm dish) and captured at 30 min intervals for 24 hours in a CO₂ incubator. The picture shows the image captured every 6 hours.

00:00:00 → 06:00:00 → 12:00:00 → 18:00:00 → 24:00:00



Observation of differentiation of fibroblasts into adipocytes by CytoWatcher

After replacing Swiss 3T3 L-1 cells (6 cm dish) with culture medium for adipocyte differentiation, photographs were captured at 60-minute intervals for 7 days in CO₂ incubator. After that, lipid droplets were stained with Oil Red O.

00:00:00 → 29:00:00 → 50:00:00 → 85:00:00



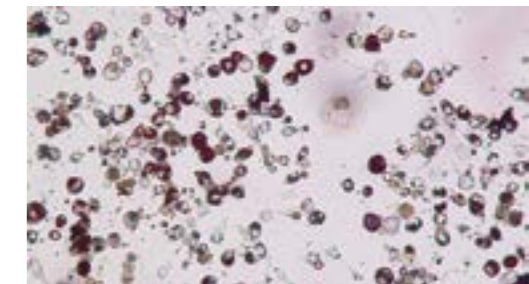
→ 106:00:00 → 135:00:00 → 169:00:00



Time lapse movie creation

Optional CS Analyzer4 (Image analysis software) enables to open time-lapse image and convert to movie file.

Stained lipid droplets with Oil Red O



Imaging of stained tissue section by CytoWatcher.

The captured image is Masson trichrome stained specimen of basal ganglia section. Left is a whole image, right is 2 times enlarged image captured by ImageSaver6.

