

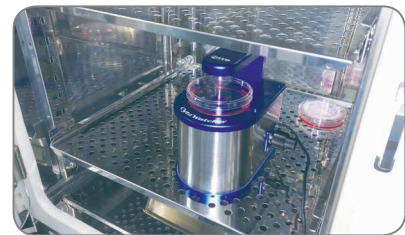
WSL-1800 *CytoWatcher*

You can more easily do time-lapse live cell imaging.



- > For bright field cell imaging with low magnification.
- > Compact size, no stress to take space.
- > Usable in CO₂ incubator, for time-lapse imaging in culture condition.
- > Equipped with 5M pixels color CMOS camera.
- > Multiple samples can be taken by connecting multiple units. **NEW**
- > A model for fluorescent imaging has appeared. **NEW**

Time-lapse live cell imaging system *CytoWatcher*



• Usable in CO₂ incubator

Since CytoWatcher body is moisture-proof, it can take time-lapsed images of culture cells with cultured in a high humidity CO₂ incubator. There is no need to introduce an expensive microscope stage culture system.



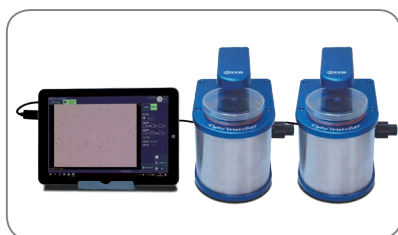
• Compact microscope

As CytoWatcher is compact, it can be used in a limited space such as a laboratory bench or a clean bench. As it is easy to carry, you can take it to your work space and use it.



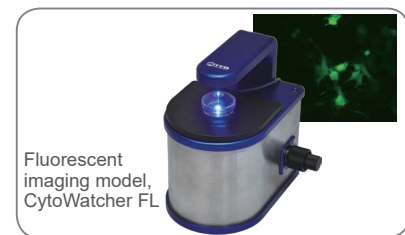
• Just connect to PC with USB cable

CytoWatcher is used by connecting it to a Windows PC (option) with a USB 3.0 cable (power is supplied from the PC via USB). If you start the control software ImageSaverT (included as standard), you can see live cell images immediately. You can also save images and take time-lapse images easily.



NEW • Multiple units can be controlled by one PC

Multiple CytoWatchers can be connected to one PC and used (up to 4) for simultaneous time-lapse imaging of multiple samples in parallel.



NEW • Fluorescent imaging

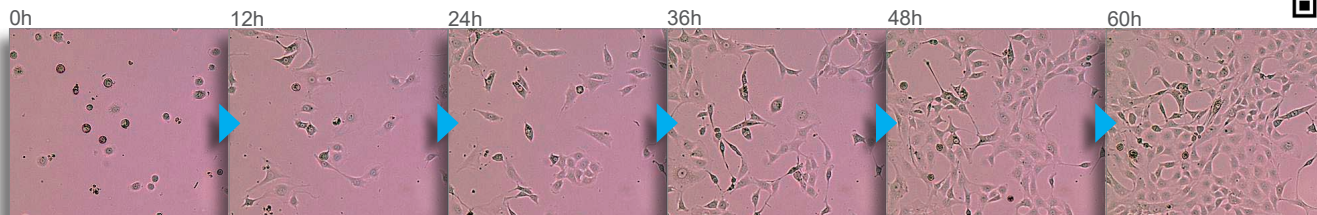
The fluorescence imaging model is equipped with a blue LED light source and an excitation / emission filter, and supports green emitted fluorescent imaging such as GFP. It is possible to set it up in the CO₂ incubator and combine it with bright field and fluorescence time-lapse imaging.

Applications

Images taken by CytoWatcher

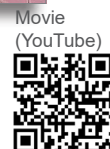
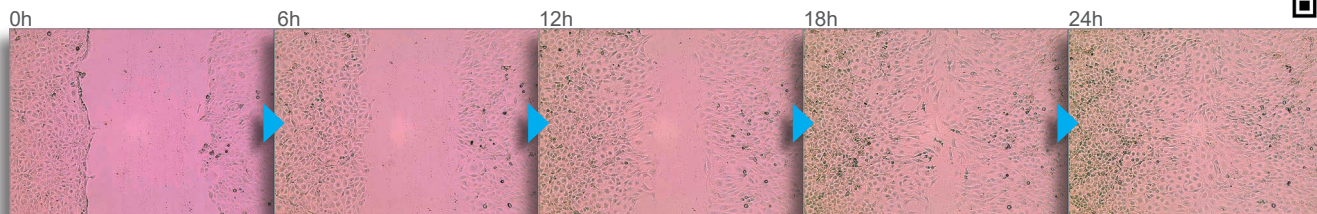
► Growth of NIH3T3 cells

Mouse fibroblast NIH3T3 cells on a 10 cm dish, Imaging for 72 h (30 minutes-intervals)



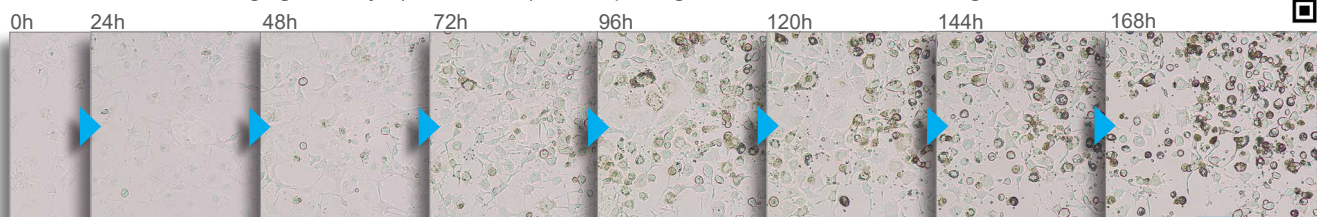
► Wound healing assay (Scratch assay)

Imaging for 24 h (30 minutes-intervals) after scratching the cultured layer of 100% confluent NIH3T3 cells on a 35 mm dish



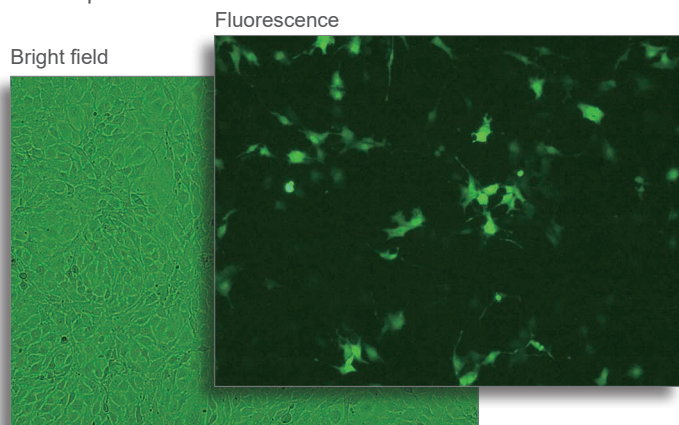
► Differentiation into Adipocyte-like cells

Swiss 3T3 L-1 cells imaging for 7days (1 h-intervals) after replacing to the differentiation inducing medium

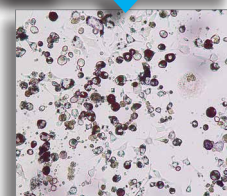


► GFP fluorescent cell imaging

Fluorescence and bright field images (using a fluorescent imaging model) of NIH 3T3 cells (a 35 mm glass bottom dish) into which EGFP expression vector has been transfected.



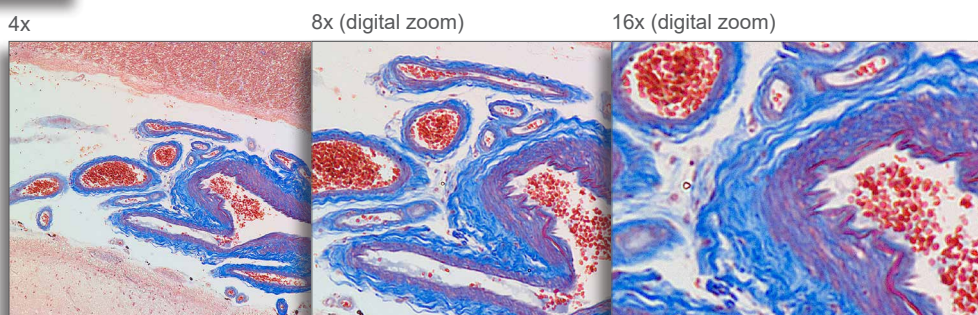
Taken after staining
lipid droplets with Oil
Red O



You can watch videos of each time-lapse shooting example on the ATTO website. Please access by QR code in the upper right (link to YouTube site) or to ATTO CytoWatcher introduction page by searching "CytoWatcher" in the browser.

► Stained tissue section

Masson trichrome stained section preparation of basal ganglia(mammal)



Specifications

WSL-1800 CytoWatcher

> Bright field imaging model

WSL-1800-B CytoWatcher FL

> Fluorescent / bright field imaging model

| Name | | WSL-1800 CytoWatcher | WSL-1800-B CytoWatcher FL |
|--------------------|--|---|--|
| Camera | | 5M pixels color CMOS camera | |
| Resolution | | 2592 x 1944 pixels | |
| Magnification | | 4 x | |
| Field of view | | 1.425 mm x 1.070 mm | |
| Focusing | | Manual adjustment | |
| Light source | | White LED (trans-illumination) | White LED (trans-illumination) Side illuminating epi-blue LED (465 nm) |
| Optical filter | | - | Excitation: 480 nm shortpass filter Emission: 525 / 45 nm bandpass filter |
| Moisture resistant | | Usable in humidity 95%RH (usable in a CO ₂ incubator) | |
| Control software | | ImageSaverT for Windows (included as standard) Capture mode: Live / Time-lapse Save image file: 8 bit TIFF / BMP / JPEG, Color / Monochrome | |
| PC connection | | USB3.0 x 1 | USB3.0 x 1, USB2.0 (or 3.0) x 1 |
| OS | | Windows 10 / 8.1 / 7 (64 / 32 bit) | |
| Size, Weight | | 130 (W) x 180 (D) x 190 (H) mm, 2.5 kg | Main unit: 130 (W) x 180 (D) x 190 (H) mm, 2.7 kg |
| Power | | USB (bus powered) | |



| Code No. | Model |
|----------|--|
| 3601800 | WSL-1800 CytoWatcher CytoWatcher unit, Control software ImageSaverT |
| 3601803 | WSL-1800-B CytoWatcher FL CytoWatcher unit, Fluorescent light source unit (equipped with optical filter), Control software ImageSaverT |

*PC is not included. You need a Windows PC with a USB 3.0 port to use it.

Option

| Code No. | Model |
|----------|---------------------------------------|
| 3601809 | USB3.0 extension cable Length: 3 m |



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