UPRIGHT FLUORESCENCE MICROSCOPE



Descriptions

In cell biology, upright microscopes are used for phase contrast or widefield fluorescence microscopy of living cells or samples that are squeezed between a slide and coverslip. An additional application is the microscopy of fixed cells or tissue sections.

In principle, upright microscopes can be used for live cell imaging, especially with dipping objective lenses. This type of system is often used for larger samples like tissue and animals.

However, there are several disadvantages of upright microscopes when compared to inverted microscopes. In general, the working distances in upright microscopes are longer, which leads to lower resolution and weaker fluorescence signals. In contrast to inverted microscopes, upright microscopes do not allow for the use of objectives with high numerical aperture directly on the coverslip bottom, on which the cells adhere. Therefore, ibidi recommends inverted microscopes for live cell imaging.

Further Information

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Brand-Model

NIKON

Basic Specifications

Optical: CF160 Infinity Optical System

Focusing: Via motorized stage Up/Down movement (Up 2 mm/Down 13 mm)

Illumination: Halogen lamp (12V100W)

- NI-ND-E Motorized ND Filter (option)
- Built-in fly-eye lens
- Built-in NCB11, ND8, ND32 filters (detachable, one additional filter mountable) and diffuser (nondetachable)
- ND2 filter (option)

Eyepieces:

- F1 10X (22)
- CFI12.5X (16)
- CFI 15x (14.5)
- CFI UW10x (25)

Substages: NI-SSR Substage

Epi-illumination light source : D-LEDI Fluorescence LED Illumination system

Equipment Website (Manufacturer)

www.nikoninstruments.com

Types of samples

microb / Animal tissue culture

Location

Analytical Service Laboratory (03-102-01)

Operator

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