

Spinning disk Andor

Room: E1036 CBI

Inverted confocal spinning-disk microscope dedicated to live cell imaging and applications that require high speed multidimensional imaging.

Excitation Lasers

405 nm – 488 nm – 560 nm – 635 nm

The laser power is control by an AOTF driven by the IQ2 software.

Microscope

Inverted Leica DMI6000 microscope

Stages

X-Y motorized stage for multiposition recordings

Z Piezo stage for fast z stack

Confocal Unit:

Yokogawa CSU22 Confocal Scanner

Variable Scanner Motor Rotation Speed: 1500 to 5000 rpm

Pinhole size: 50 μ m

Camera:

Andor's iXonEM+ 897 back-illuminated EMCCD

512 x 512 pixels

Pixel size: 16 μ m

-85 °C air cooled

Objectives

Default objectives	Magnification	Numerical aperture	Working distance	Immersion	coverglass
PL Fluotar	10x	0.3	11	DRY	-
HC PL APO	20x	0.7	0.59	DRY	0.17
HCX PL APO	40x	0.85	0.24	DRY	CORR 0.11-0.23 mm
HCX PL APO	63x	1.40-0.6	0.1	oil	0.17
HCX PL APO	100x	1.40-0.7	0.09	oil	

Objectives on demand	Magnification	Numerical aperture	Working distance	Immersion	coverglass
HCX PL APO	40X	1.25-0.75	0.1	oil	0.17

Detection

4 emission settings are accessible using a motorized filter wheel (Sutter Lambda 10-B)

Filter name	Wavelength range, nm
405-568	Dual band 410 to 475 and 580 to 655
442-647	Dual band 450 to 515 and 655LP
488	495 to 560
488-568	Dual band 500 to 550 and 580 to 710

Filter cubes for epifluorescence observation

Cube name	Excitation filter - Dichroic - Emission filter		
A4	BP 360/40	400	BP 470/40
GFP	BP 470/40	500	BP 525/50
RFP	BP 546/12	560	BP 605/75

Software:
Metamorph

Temperature\CO₂:
A Tokai Hit Stage Top Incubator allows temperature, humidity and CO₂ control.
If you need to use the temperature control, 3 hours are needed to stabilize the temperature.