

Microscope 6

Room: E1035

Upright manual microscope (Leica DMLA) dedicated to bright field, phase contrast, dark field and fluorescence imaging of fixed samples. Equipped with a CoolSNAP CF Monochrome camera (Photometrics) suitable for near infrared emitting fluorochromes.

Illumination	Wavelength range (nm)	Contrast methods
Mercury arc lamp HBO 100W	UV - IR	Fluorescence
Halogen lamp 100W	White	Bright field, Phase contrast, Dark field

Fluorescence cubes	Excitation (nm)	Beam-splitter (nm)	Emission (nm)	Application
A4	BP 360/40	400	BP 470/40	DAPI, Hoechst
L5	BP 480/40	505	BP 527/30	FITC, Alexa 488, GFP
Y3	BP 545/40	565	BP 610/75	Cy3, Alexa 555
On demand :				
A	BP 360/20	400	LP 425	DAPI, Hoechst
CFP	BP 436/20	455	BP 480/40	CFP
GFP	BP 470/40	500	BP 525/50	GFP
YFP	BP 500/20	515	BP 535/30	YFP
Ds Red	NA	NA	NA	RFP
N2.1	BP 515 - 560	580	LP 590	Alexa594, TRITC, Rhodamin B
TX2 (disparu)	BP 560/40	595	BP 645/75	Alexa 568, Alexa 894, Texas Red
Y5	BP 620/60	660	BP 700/75	Cy5
Y7	BP 710/75	750	BP 810/90	Alexa 700, Cy7
Red-Green (GR)	BP 490/20 BP 575/30	505 600	BP 525/20 BP 635/40	FITC + Cy3
I3	BP 450 - 490	510	LP 515	FITC, GFP, Alexa 488, ...

Default objectives	Magnification	Numerical Aperture	Working Distance (mm)	Immersion Medium	Coverslip
N PLAN 5x/0.12	5x	0.12	11.7	Air	-
N PLAN 10x/0.25 PH1	10x	0.25	17.6	Air	-
HC PLAN APO 20x/0.70 PH2	20x	0.70	0.59	Air	0.17
PL FLUOTAR 40x/0.70 PH2	40x	0.70	0.4	Air	0.17
HCX PL APO 63x/1.32-0.6 OIL CS	63x	1.32	0.1	Oil	0.17
HCX PL APO 100x/1.40 OIL PH3 CS	100x	1.40	0.09	Oil	0.17
On demand :					

Default additional magnifier - reducer	None
On demand : Range	0.5x, 0.63x, ...

Zoom Range	None -
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Default Camera	CoolSNAP CF monochrome (Photometrics)
Digitizer	12 bit
Resolution	1392 x 1040 pixels
Pixel size	4.65 x 4.65 μm
Binning	1, 2, 4, 8
Wavelength range above 20% Q. E.	370-670 nm
Image type	RGB

Acquisition Softwares	Suitable cameras	Binning
CoolSnap	Photometrics Color-mosaic cameras	No
RImage (bugs)	Photometrics Monochrome & Color-mosaic cameras	Yes
Micro-Manager (experimental)	Wide choice of Monochrome cameras; Manual Multi Dimensional Acquisition	1, 2, 4, 8

Visualization, analyzis and processing softwares	
IrfanView	
ImageJ	
Fiji	

Operating system	Windows 7 32-bit
CPU	Pentium 4 CPU 3.2 GHz
RAM	4 GB
Graphic Card	Radeon X300/X550 Series + Radeon X300/X550 Series Secondary