

Zeiss Microdissector PALM

Location: Bat. Archimed, C3M, room G-54ter



Capabilities:

- Laser microdissection
- Compatibility with many types of samples : Slides, MatTek, Labteck, Multiwell plates
- Color camera (IHC, β -gal assays...)
- Fluorescence (see filter cubes)
- Fully automated
- Stitched imaging of large areas

Laser Microdissection:

- Samples: tissue, fixed or live culture cells, chromosomes...
- Contrast: bright field, phase contrast, IHC colors staining, fluorescence
- Collectors: single tube and multiple tubes (x8) holders

Equipment:

- Zeiss Axio Observer Z1 inverted microscope
- Fluorescence illumination: X-Cite
- Color camera MRC5
- Mono-chrome camera mRm (for fluorescence)
- Softwares: Axiovision ; Palmrobo
- Pulsed UV Laser (355 nm)

Filter cubes for eyepieces visualisation:

Cube	Fluorophores	Excitation wavelengths	Dichroic	Emission wavelength
	DAPI, Hoechst	390-420	425	LP 450
	A488, GFP, FITC	450-490	510	515-565
	A568, RFP, TxRed	510-560	580	LP 590

Light Microscopy Core Facility



entre Méditerranéen de Médecine Moléculaire

Inserm U1065

Warning: the emission filters are not selective and lead to channels crosstalk.

Objectives:

Magnification	NA	Type	immersion medium	WD (mm)	miscellaneous
5x	0.25	Fluar	air	12,5	
10x	0.3	EC Plan NeoFl	air	5.5	
20x	0.4	LD Plan NeoFl	air	7,9 at cover glass 0,75	Ph2
40x	0.6	LD Plan NeoFl	air	2,9 at cover glass 0,75	Ph2
63x	0.75	LD Plan NeoFl	air	1,7 at cover glass 0,75	Ph2
150x	1.35	Plan Apochroma	oil	0,17 at cover glass 0,16	DIC

Scales:

	Color camera (MRC5)		"Fluorescence" camera (MRm)	
Magnification	Scale (bin 1)	Field of View	Scale (bin 1)	Field of View
5x	1.08 $\mu\text{m}/\text{pixel}$	2789x2090 μm	1.29 $\mu\text{m}/\text{pixel}$	1791x1342 μm
10x	540 nm/pixel	1395x1045 μm	645 nm/pixel	895x671 μm
20x	270 nm/pixel	697x522 μm	322 nm/pixel	448x335 μm
40x	135 nm/pixel	349x261 μm	161 nm/pixel	224x168 μm
63x	86 nm/pixel	221x166 μm	102 nm/pixel	142x107 μm
150x	36 nm/pixel	93x70 μm	43 nm/pixel	60x45 μm