

Leica AM TIRF: Total Internal Reflection Microscopy

Location: Bat. Archimed, C3M, room G-40



Capabilities :

- Live cell imaging in wide field fluorescence, TIRF and brightfield
- Environmental chamber (temperature and CO₂)
- Compatibility with many types of samples : Slides, MatTek, Labteck, Multiwell plates
- Multipositions acquisitions
- Three fluorescent channels : GFP, YFP, RFP

TIRF:

- Imaging basal membrane processes (endocytose, cellular adherence...)
- Imaging at the coverslip proximity
- Two color TIRF with automatic depth correction (Excitation 488 nm and 561 nm)
- Automated alignment and TIRF depth selection

Equipment:

- Leica DMI6000B inverted microscope
- Leica EL6000 external light source
- Camera Leica DFC360FX (12 bits => 4096 gray levels)
- Software: LAS AF
- Lasers : 488 nm (6 mW) ; 561 nm (10.3 mW)

Objectives:

Magnification	NA	Type	immersion medium	WD (mm)	miscellaneous
2.5x	0.07	HCX FL Plan	air	11.2	
5x	0.12	N Plan	air	14	Ph0
10x	0.3	HCX PL FL	air	11	Ph1
20x	0.4	HCX PL FL L Corr	air	6.9	Ph1
40x	0.75	HCX PL FL	air	0.40	Ph2

Light Microscopy Core Facility



entre **M**éditerranéen de **M**édecine **M**oléculaire

Inserm U1065

100x	1.46	HCX PL APO Korr	oil	0.09	23-37°C
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Scales:

Magnification	Scale (bin 1)	Field of View
2.5x	3 μm /pixel	3.59x2.68 mm
5x	1 μm /pixel	1.79x1.34 mm
10x	645 nm/pixel	897.20x670.16 μm
20x	323 nm/pixel	448.60x335.08 μm
40x	161 nm/pixel	224.30x167.54 μm
100x	65 nm/pixel	89.72x67.02 μm