

Macro Confocal (Leica TCS LSI)

Room : E1038 CBI

Upright confocal microscope (Leica) dedicated to the conventional confocal imaging equipped with a SPE scan head, an ApoZ16 motorized zoom and motorized x-y-z stages.

Operating System

Windows 7pro 32-bits

Software:

Leica LAS AF software 2.7.3.9723

- Acquisition modes: xyz, xzy, xyt, xzt, xyzt, xzyt,
- Multiposition (Mark&Find), Overview Image (Tile Scan), Autofocus:best Focus
- Licenses: TCS SPE-FRAP Wizard-Live Data Mode

Confocal Unit:

SPE scan head. No simultaneous acquisition of different fluorochromes. Only sequential acquisitions.
Non AOBs (quadra dichroic: QD405/488/561/635) Standard scanner with variable speed (400,600,800 Hz)

Excitation Lasers

Illumination	Wavelength range, nm	Application examples
Laser diode 405 nm	405	Confocal fluorescence imaging
Laser diode 488 nm	488	Confocal fluorescence imaging
Laser diode 561 nm	561	Confocal fluorescence imaging
Laser diode 635 nm	635	Confocal fluorescence imaging

Stages and motorized column

X-Y-Z motorized stages for multiposition recordings.

Z galvo motorized Märzhäuser stage

Smart move and Smart touch

Motorized column

Zoom

Optical: ApoZ16A (0, 57-9,2 motorized)

Numerical: 1 to 58

Objectives

Default objectives	Magnification	NA*	Working distance
Planapochromatic 2x	2x	0.23	39mm
Planapochromatic 5xLWD	5x	0.5	19mm

* at maximal optical zoom

Other Planapochromatic objectives on demand 0.5x (WD 187mm) -1x.(WD 97mm)

Detection

Detection	Wavelength range, nm	Application examples
1 PMT	405,488,561,635	Confocal fluorescence imaging,
1 PMT trans	Laser wavelength	Transmission imaging

Epifluorescence observation

Illumination EL6000 -120W Metal Halid lamp+ optical fiber

Filter cubes for epifluorescence observation

Cube name	Excitation filter - Dichroic - Emission filter		
A4(DAPI)	BP 360/40	400	BP 470/40
L5	BP 480/40	505	BP 527/30
Y3	BP545/30	565	BP610/75
RFP	BP546/12	560	BP605/75

(à voir pour créer un lien actif vers les courbes en transmission des filtres....)

Transmission observation

Illumination base

Temperature-CO2:

No Environmental chamber for temperature control (but Inlet available). No CO₂