

Zeiss LSM 780 Inverted Confocal Microscope



GENERAL SPECIFICATIONS:

- Axio Examiner Z1 motorised upright laser scanning microscope with 7 visible laser lines
- Freely selectable ROI for laser scanning, bleaching and photoactivation.
- Scan speeds of up to 8 frames/second with 512 x 512 pixels.
- xy, xz, xyz, xyzt, lambda, line scan and spot scan modes.
- Transmitted light brightfield and incident light fluorescence using metal halide HXP light source with filters for blue, green and red emission.
- DIC optics for 25X, 40X, and 63X objectives
- Definite Focus Unit for long-term focus stability

MICROSCOPE OBJECTIVES:

- EC Plan-Neofluar 10x/0.30 WD=5.2 mm
- LD LCI PA 25x/0.8 DIC WD=0.57 mm Imm Corr (UV)VIS-IR (Multi-Immersion (Oil, glycerine, water))
- Objective LD C-Apochromat 40x/1.1 W Corr
- Plan Apochromat 63x/1.4 oil
- Plan Apochromat 100x/1.4 oil

LASER ILLUMINATION :

- Diode 405nm
- Argon multiline 458/488/514nm (25 mW)
- Diode 561nm
- HeNe 594 nm
- HeNe 633nm

DETECTORS:

- Descanned Detectors (Single photon) 2 x GaAsP plus 2 standard PMT NDD detectors

ENVIRONMENT CONTROL:

- Incubator chamber with temperature and CO2 control

SOFTWARE:

- ZEN Black 2011 SP7 LSM software

3D and 4D reconstruction and animation.

Analysis and quantification for co-localisation.

Software modules for FRAP, FRET, FCS, Tiles, Positions, and Regions, and Experiment Designer