

Laser scanning confocal microscope Zeiss LSM 780 with Airyscan detector

Location:

CELLIM, building A26, room 1S2S5

Booking alias:

LSM780_Airy-A26

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Reservations:

<https://booking.ceitec.cz/PlanningBoard.html>

Overview:

Inverted microscope Zeiss Axio Observer.Z1 with laser scanning unit LSM 780. Microscope is equipped with three solid state lasers (405, 561 and 633 nm), argon laser (458, 488 and 514 nm), two multi-alkali PMT detectors, 32 channel spectral GaAsP detector, Airyscan detector and T-PMT for transmitted light detection. The Airyscan detector allows acquisition with increased resolution and signal to noise ratio compared to normal confocal scanning. Microscope is also equipped with CCD camera AxioCam MRm.

Specifications:

Objectives

Plan-Neofluar 10x / 0.30 AIR

Plan-Neofluar 20x / 0.5 AIR

Plan-Apochromat 25x / 0.80 MIM

C-Apochromat 40x / 1.20 W

Plan-Neofluar 63x / 1.30 W

Plan-Apochromat 63x / 1.40 OIL

Transmitted light techniques

Brightfield

Differential interference contrast

Phase contrast

Fluorescence light source

HXP 120V

Filters

DAPI (F46-000), GFP (F36-525), Cy3 (F36-542),

Cy5 (F36-523)

Lasers

405 nm, 458 nm, 488 nm, 514 nm, 561 nm, 633 nm

Filters for Airyscan

BP 420-480 + BP 495-550

BP 420-480 + BP 495-620

BP 420-480 + LP 605

BP 465-505 + LP 525

BP 495-550 + LP 570

BP 570-620 + LP 645

Camera

monochromatic camera AxioCam MRm, CCD sensor, 1388 x 1040 pixels, 6.45 x 6.45 μm size

Software

Zen Black

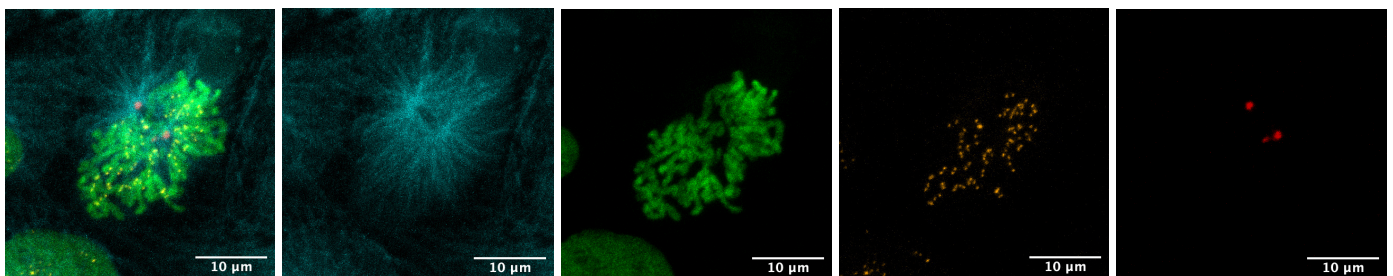
Manual:



More information:



Example:



Human dividing embryonic cell. Light blue: microtubules, light green: DNA, orange: kinetochore, red: centrosomes.
 Objective: Plan-Apochromat 63x / 1.40 Oil.