

Zeiss AxioZoom.V16 - Apotome.2

Location:

CELLIM, building A2, room 1.15

Booking alias:

AxioZoom.V16-Apotome

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More information:


SCAN ME

Reservations:

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

Overview:

Fully motorized fluorescence stereo zoom microscope for large fields AxioZoom.V16 combines a 16x zoom with high numerical aperture objectives. With Plan-NEOFLUAR Z 2.3x you achieve a numerical aperture of NA 0.5 in an object field of 1.5 millimeters. You can select transmitted, reflected mode or fluorescence mode together with structured illumination module Apotome.2 to perform optical sections with high contrast on thick specimens.

Specifications:

Objectives

Plan Neofluar 1x / 0.25 fwd 56 mm

Plan Neofluar 2.3x / 0.57 fwd 10.6 mm

Transmitted light source

CL 9000 LED CAN

Transmitted light techniques

Brightfield

Darkfield

Oblique illumination

Fluorescence light source

HXP 120V

Filters

 DAPI (F-set 96HE), GFP (F-set 38), mcherry (F-set 63HE)
 (on demand: CFP (F-set 47), Cy5 (F-set 50))

Cameras

color camera AxioCam 305 color

2464 x 2056 pixels, 3.45 x 3.45 μm size

monochromatic camera AxioCam 512 mono

4250 x 2838 pixels, 3.1 x 3.1 μm size

Apotome.2

for optical sections

(works in fluorescence mode only)

Software

Zen Blue

Manual:


SCAN ME

SCAN ME

Interactive flash tutorial - Apotome

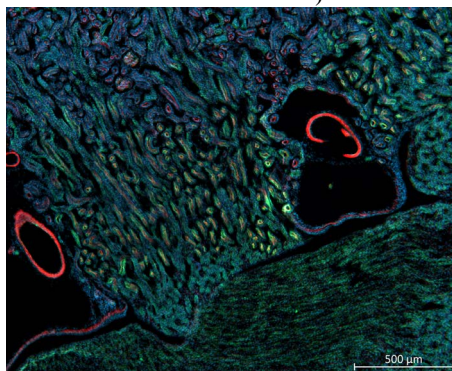
Examples:

Transmitted light

Picture of *Pediculus capitis*. To obtain image with big depth of focus, multiple images were taken at different Z position and final image was obtained using EDF function of ZEN software.


Fluorescence

Section of mouse kidney stained with AlexaFluor488-WGA, AlexaFluor568-Phalloidin and DAPI. Image taken using Apotome.2 at lower magnification with Plan Neofluar 2.3x objective.


Fluorescence

Same section as previous image, but taken with simply using higher magnification zoom factor, without objective changing.

