

Carl Zeiss Axiozoom.V16

Fluorescence zoom upright microscope which combines the benefits of stereomicroscopes such as zoom optics and long working distances with the higher resolutions of traditional light microscopes. The macroscope in IMCF at BIOCEV is equipped with a 2.3x magnification objective combined with numerical aperture 0.57 what offers superior brightness in large objects fields. In comparable image fields, the Axio Zoom.V16 offers a 2.5 times higher resolution and 10 times brighter fluorescence than generally used stereomicroscopes.

Applications

- visualization of large samples, e.g. whole model organism, in fluorescence contrast or transmitted light with the possibility to zoom in to the smallest details of the sample. Long working distance of the available objectives allows comfortable manipulation with specimens.
- basic documentation of histological samples.

Microscope

Axiozoom.V16 is a fluorescence zoom upright microscope equipped with a motorized stage with travel range 150 x 100 mm and the following:

Software

ZEN blue pro 2012

Illumination

- Transmitted light – Zeiss CL 9000 LED CAN with day-light filter for cold light LED
- Fluorescence - HXP 120 V (D) – long-life, metal halide illuminator

Filter cubes (turret with 6 positions)		
Filter set 49 DAPI	EX 365, BS 395, EM 445/50	exchangeable
Filter set 38 GFP	EX 470/40, BS 495, EM 525/50	exchangeable
Filter set 63 RFP	EX 572/25, BS 590, EM 629/62	exchangeable
Filter set 50 Cy5	EX 640/30, BS 660, EM 690/50	exchangeable

Objectives

Type	Immersion	Magnif.	NA	WD [mm]	DIC/Correction Ring
PlanNeoFluar Z	Air	1x	0.25	56	-
PlanNeoFluar Z	Air	2.3x	0.57	10.6	-

Detection

Camera AxioCam 506 mono , 6 Mpix (2752x2208), pixel size 4,54 μm x 4.54 μm , 19 fps at full frame, effective sensor size 12.5 x 10.0 mm

Link to manufacturer web:

http://www.zeiss.com/microscopy/en_de/products/stereo-zoom-microscopes/axio-zoom-v16-for-materials.html