

Zeiss Inverted Microscope

Zeiss Axio Observer 7



Tool Type: "Inverted Microscope"

Location: "Elings Hall 2411"

| Supervisor | Tool Lead |
|--------------------|------------|
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Description: "Inverted Microscope"

Manufacturer: "Zeiss"

About

Inverted microscope Axio Observer 7 ACR for transmitted-light brightfield LED, phase contrast, differential interference contrast, fluorescence with Colibri 7; equipped with ACR function, Scanning Stage STEP and Docking station

Detailed Specifications

Objectives

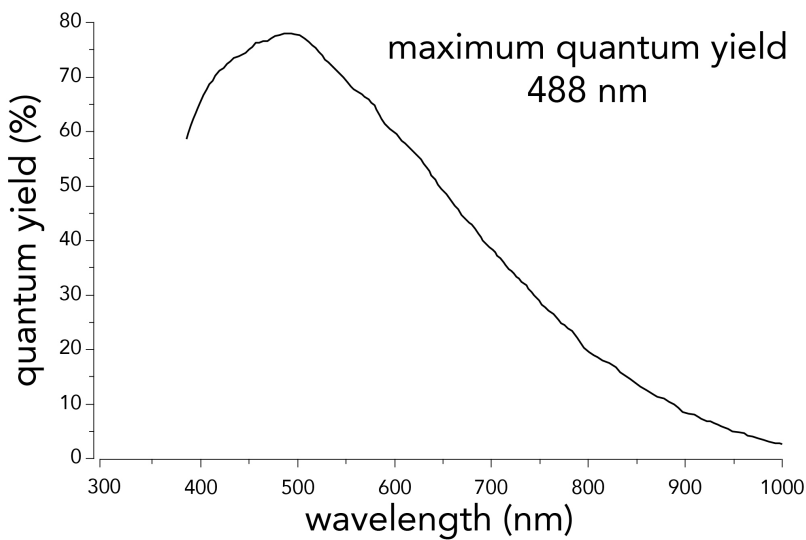
| Objective | Magnification | Imm | NA | Ph | FWD | Resolution (µm/px) | Field of View (µm) |
|---|---------------|-------|-----|----|-----------|--------------------|--------------------|
| 10X EC Plan-Neofluar Ph1-Air | 10 | AIR | 0.3 | 1 | 5.2 | 0.586 | 1,125 x 713 |
| 20X Plan-Apochromat M27 | 20X | AIR | 0.8 | 1 | 0.55 | 0.293 | 563 x 356 |
| 20X LD-Neofluar Korr Ph2 M27 Air | 20X | AIR | 0.4 | 2 | 7.4 – 8.4 | 0.293 | 562 x 356 |
| 40X LD Plan-Neofluar Korr Ph2 M27-Air | 40X | AIR | 0.6 | 2 | 3.3 – 2.5 | 0.1465 | 281 x 178 |
| 40X LD LCI Plan-Apochromat Imm Korr DIC M27 Water | 40X | WATER | 1.2 | 2 | 0.41 | 0.1465 | 281 x 178 |
| 63X Plan-Apochromat Oil DIC M27 Oil | 63X | OIL | 1.4 | 2 | 0.19 | 0.093 | 178 x 113 |

FWD: Free Working Distance
 NA: Numerical Aperature
 Imm: Immersion media
 Ph: Phase contrast

Filter Sets

| Position | Filter Set | Exitation (nm) | Emmision (nm) | Beamsplitter |
|----------|--------------|--|---|--|
| 1 | 38 HE GFP | BP 470/40 | BP 525/50 | FT 495 |
| 2 | 43 HE DsRED | BP 550/25 | BP 605/70 | FT 570 |
| 3 | 50 CY5 | BP 640/30 | BP 690/50 | FT 660 |
| 4 | 90 HE D/G/C3 | BP 385/30 BP 469/38 BP 555/30 BP 631/33 | QBP 425/30 QBP 514/30 QBP 592/25 QBP 709/100 | QBS 405 QBS 493 QBS 575 QBS 653 |
| 5 | 96 HE BFP | BP 390 | BP 450 | FT 420 |
| 6 | POL TL | | | |

Camera Sensitivity to different wavelengths



Filter Set Specs

[Position 1 GFP pos-1-38hegfp.jpg](#)

Position 2 DsRed

pos-2-43hedsred.jpg

Position 3 CY5

pos-3-50cy5.jpg

Position 4 DAPI FITC TRITC

pos-4-90he_d_g_c3.jpg

Position 5 96 HE

pos-5-96hebfp.jpg

Plate Layout Template

[96 well Plate](#)

96_well_plate_layout.pdf

Safety Concerns

Read the manufactures manual before first use. If the Zeiss inverted microscope acts in a way that is not described by the manual, turn off the printer and contact Zeiss.

- Never place your finger near the machine until all parts have stopped moving. Moving parts can cause serious injury
 - Never clean or service the microscope while it is on
 - The microscope uses UV light to excite some dyes. Never look directly at LED light nor expose skin. Serious injury may result from exposure
 - Disassembling the microscope may cause an electric shock or damage to the instrument. Do not disassemble any parts of the microscope not mentioned in the instruction manual. In case of a problem with the microscope
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Operating Procedures

Insert Text Here!

Reference Documentation

zen_2_blue_edition_-_software_guide.pdf

Training Documentation

From:
<https://bpm-wiki.cnsi.ucsb.edu/> - NSF BioPACIFIC MIP Wiki

Permanent link:
https://bpm-wiki.cnsi.ucsb.edu/doku.php?id=inverted_microscope&rev=1628104644

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