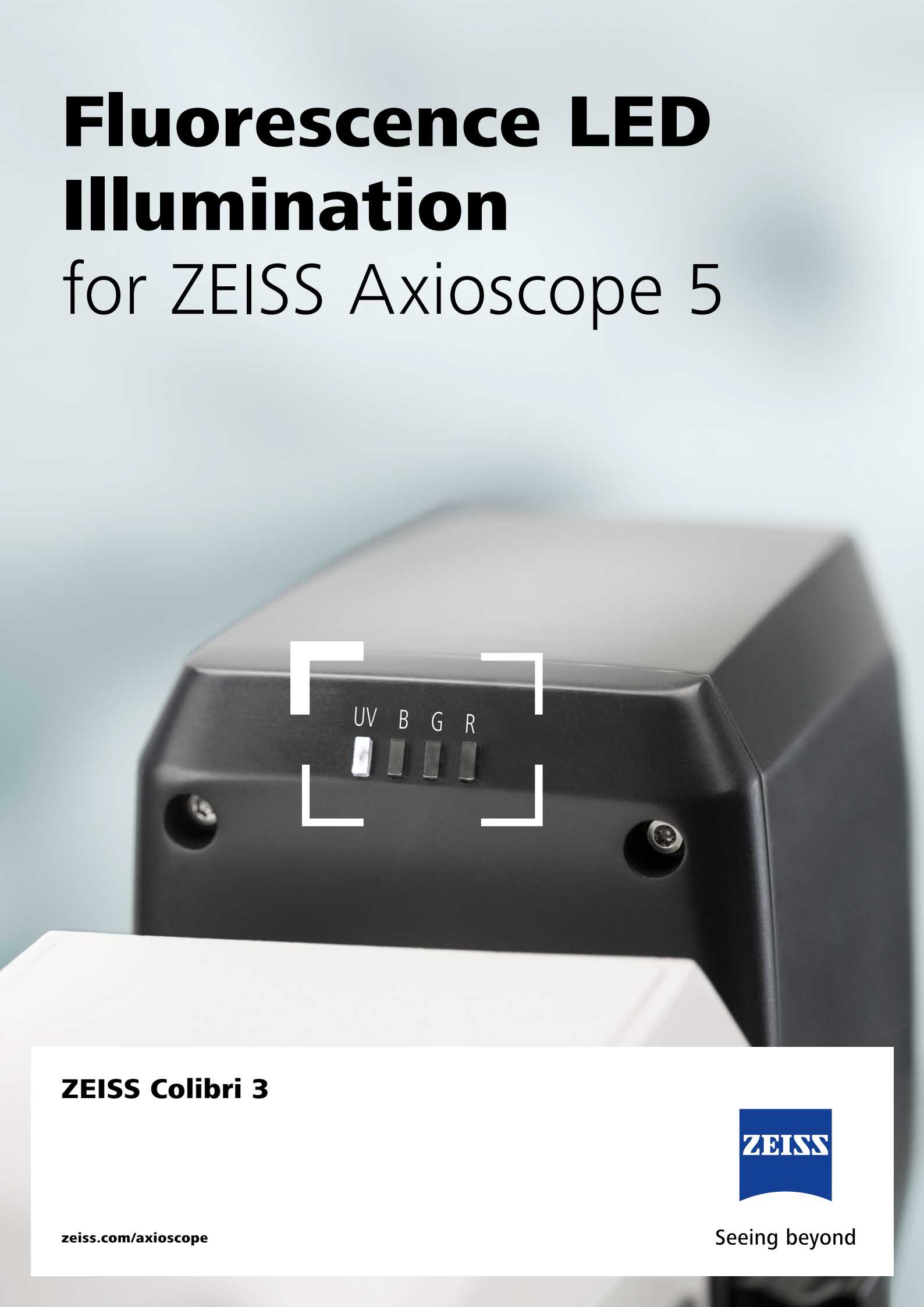
# Fluorescence LED Illumination

for ZEISS Axioscope 5




**ZEISS Colibri 3**

ZEISS

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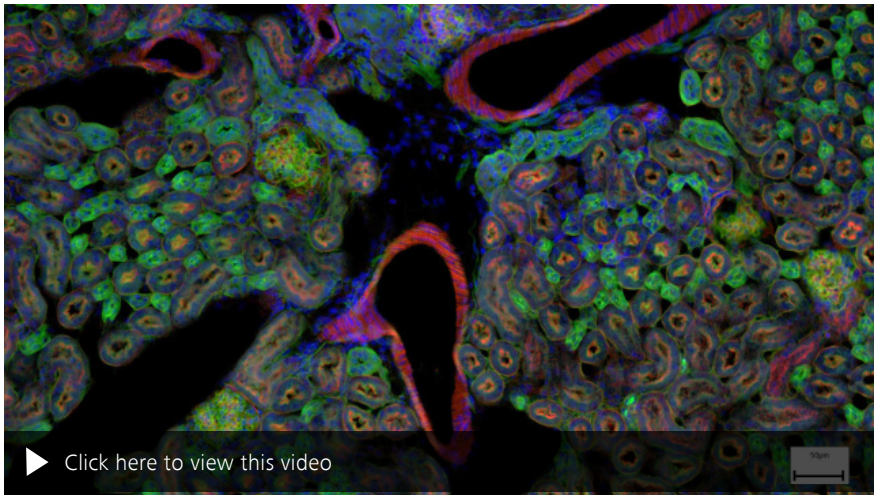
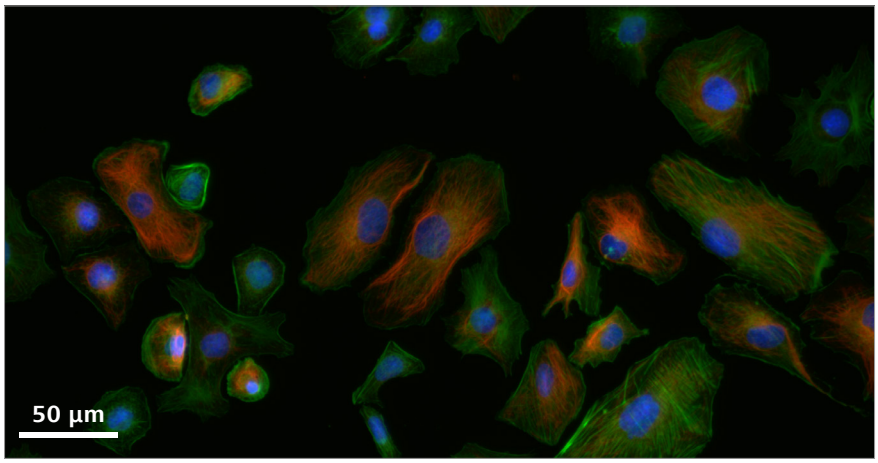
Seeing beyond

# **Fluorescence LED Illumination**
for ZEISS Axioscope 5

In your lab you often need to work with specific fluorescent labels. These labels need to be excited by exactly the right wavelength.
Complement your Axioscope 5 with the optional fluorescence LED illumination Colibri 3, and acquire brilliant fluorescence images with ease. Colibri 3 delivers the right wavelength and intensity to excite fluorescent dyes and proteins in a gentle way. You switch effortlessly between the channels for UV, blue, green and red excitation. Then, just select the relevant channels and press Snap.

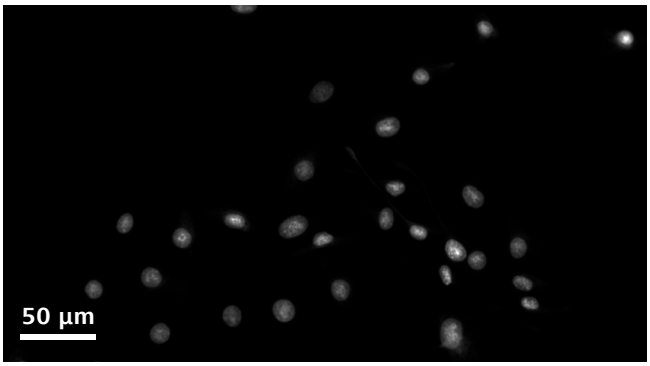


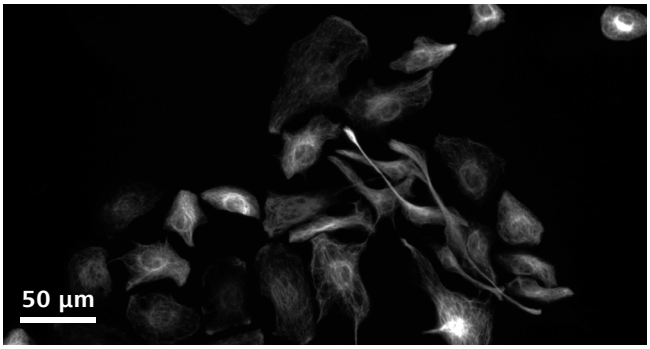

*Mouse kidney in fluorescence, cryosection, AF 488 - WGA, AF 568 Phalloidin, DAPI, acquired with ZEISS Axioscope 5, objective: Plan-Apochromat 20×/0.8*

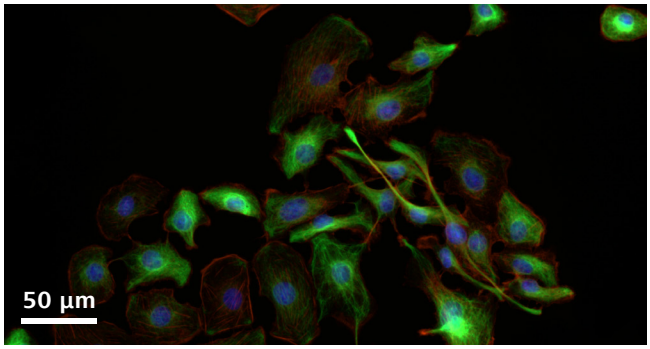



*Mink Uterus Endometrium Epithelial Cells, vimentin – red, F-actin – green, nucleus – blue; acquired with ZEISS Axioscope 5, Colibri 3 and Axiocam 202 mono in stand-alone mode, objective: Plan-Apochromat 40×/0.95*

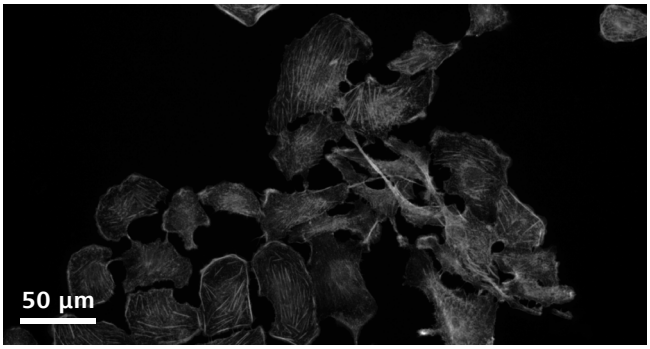
- Save time and money thanks to the long LED lifetime and adjustment-free operation.
- Choose up to four fluorescence LEDs to fit your needs.
- Upgrade anytime you need to.
- Automatic component recognition of the encoded fluorescence LEDs ensure easy setup.
- Individually control and switch between channels for UV, blue, green and red excitation – or use selected wavelenghts simultaneously.
- Individual fluorescence LED intensity is automatically memorized per objective and reflector position.
- With direct visual status feedback, you are always sure which fluorescence LED is in use.
- The integrated design does not require an additional power supply and controller; this saves space and makes for easy and ergonomic operation.




*Combined fluorescence images of an owl monkey kidney acquired with ZEISS Axioscope 5, objective: Plan-Apochromat 20×/0.8*




*Fluorescence images of an owl monkey kidney acquired with ZEISS Axioscope 5, objective: Plan-Apochromat 20×/0.8*

# Technical Data

Colibri 3 illumination system for fluorescence imaging. Colibri 3 can be used with Axioscope 5 stand 430035-9061-000.

### With the following possible LED module

- LED module 385 nm for Axio (UV)
  423052-9593-000
- LED module 470 nm for Axio (B)
  423052-9573-000
- LED module 565 nm for Axio (G)
  423052-9602-000
- LED module 625 nm for Axio (R)
  423052-9522-000

### Colibri 3 is available in the following 3 configurations

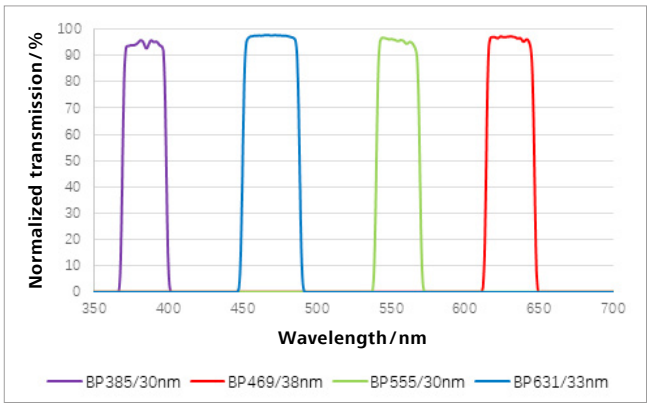
- 423052-9505-000 for UV/B/G/R
- 423052-9440-000 for UV/B/G
- 423052-9450-000 for B/G

### Matched filters

The excitation filters in Colibri 3 have been specifically designed to precisely match the LEDs' emission spectra. For highest imaging efficiency single and multiband pass LED filters sets are available. Precise matching of LEDs with filters results in minimal crosstalk and maximum excitation and emission efficiency.

### Broad spectrum excitation

Four illumination channels cover the most important dyes, fluorescent proteins and probes




*Built-in excitation filter of LED modules for Colibri 3.*

### Available Excitation Bands for ZEISS Colibri 3

| Line | Wavelength / Bandwidth | Recommended Dye (Examples) |
|---|---|---|
| UV | 385/30 nm | DAPI, Hoechst 33342, Hoechst 33258, Alexa Fluor 350, Alexa Fluor 405, Indo-1, eBFP/BFP, eGFP (wt), True Blue |
| B | 469/38 nm | FM1-43, Cy2, eGFP, NBD, MitoTracker Green, Alexa Fluor 488, BCECF, Calcein, DiO SNAFL, YO-Pro-1, Nissl, LysoSensor Green, mHoneydew, FITC/Fluorescein, Kaede (green/red), PerCP, YoYo-1, FuraRed |
| G | 555/30 nm | TRITC, 7-AAD, Cy3, tdTomato, Alexa Fluor 546, Alexa Fluor 555, DsRed, mOrange, TagRFP, SNARF, DyLight 549, Spectrum Orange |
| R | 631/33 nm | Alexa Fluor 633, Alexa Fluor 647, Cy5, DRAQ5, ToTo-3, ATTO-655, MitoTracker DeepRed, APC, ATTO-647N |

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