

## Olympus Epifluorescence and Calcium Imaging Microscope



A dual component system configured for both conventional epifluorescence microscopy and live cell calcium imaging using the calcium sensitive indicator dye, fura-2.

<b>Microscope</b>	Olympus IX70 inverted microscope										
<b>Objectives</b>	Fluorescence: 10x, 20x, 40x, 40x (LWD) and 60x oil; Calcium imaging UV/Fluor: 20x (340 nm) and 40x (340nm); Phase Contrast: 20x										
<b>Filter Cubes</b>	<table border="0"> <tr> <td>U-MNUA (Blue):</td> <td>Ex 360-370 nm, Di 400 nm, Em 420-460 nm</td> </tr> <tr> <td>U-MNIBA (Green):</td> <td>Ex 470-490 nm, Di 505 nm, Em BP 515-550 nm</td> </tr> <tr> <td>MNG (Orange):</td> <td>Ex 539-550 nm, Di 570 nm, Em LP 590 nm</td> </tr> <tr> <td>Cy5 (Long Red):</td> <td>Ex 590 645 nm, Di 660 nm, Em 670-730 nm</td> </tr> <tr> <td>Calcium Imaging (Green):</td> <td>Ex 340 and 380 nm, Em 510 nm</td> </tr> </table>	U-MNUA (Blue):	Ex 360-370 nm, Di 400 nm, Em 420-460 nm	U-MNIBA (Green):	Ex 470-490 nm, Di 505 nm, Em BP 515-550 nm	MNG (Orange):	Ex 539-550 nm, Di 570 nm, Em LP 590 nm	Cy5 (Long Red):	Ex 590 645 nm, Di 660 nm, Em 670-730 nm	Calcium Imaging (Green):	Ex 340 and 380 nm, Em 510 nm
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<b>Automation</b>	All manual										
<b>Illumination</b>	Fluorescence: Mercury (epi) and Xenon (calcium) Burners; Brightfield/Phase Contrast: Halogen bulb.										
<b>Camera</b>	Q Imaging Retiga-SRV Fast 1394 12 bit monochrome CCD camera.										
<b>Software</b>	Nis-Elements Advanced Research Imaging Acquisition and analysis software.										
<b>Other</b>	Sutter Instrument Co. Lambda 10/2 Filter Wheel Controller for rapid switching between 340 and 380 nm excitation filters during live cell calcium imaging.										
<b>Applications</b>	<ul style="list-style-type: none"> <li>- <i>Conventional epifluorescent imaging (photodocumentation) of immunocytochemically and immunohistochemically prepared specimens.</i></li> <li>- <i>Long working distance 40x objective for short term fluorescent imaging of live cells through standard culture plates and culture clusters.</i></li> <li>- <i>NIS-Elements software includes a full suite of image processing and analysis tools and an additional plug-in module specific for image acquisition and analysis of data from live cell calcium imaging experiments.</i></li> </ul>										