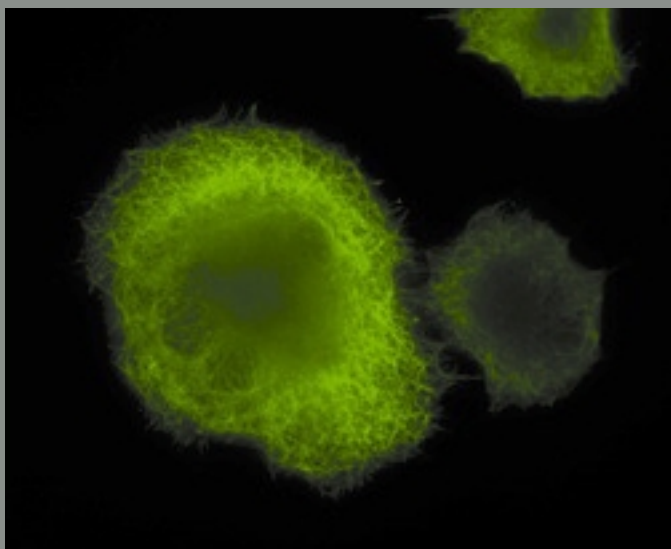


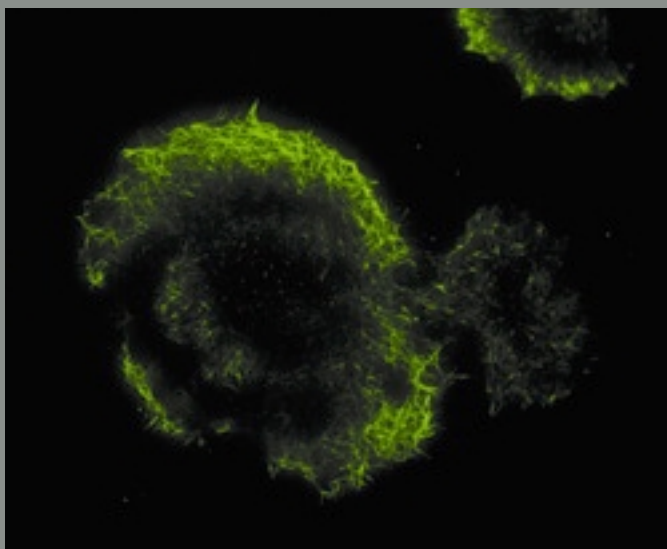
IX2-ARCEVA

World's first evanescent illumination system from an arc lamp source

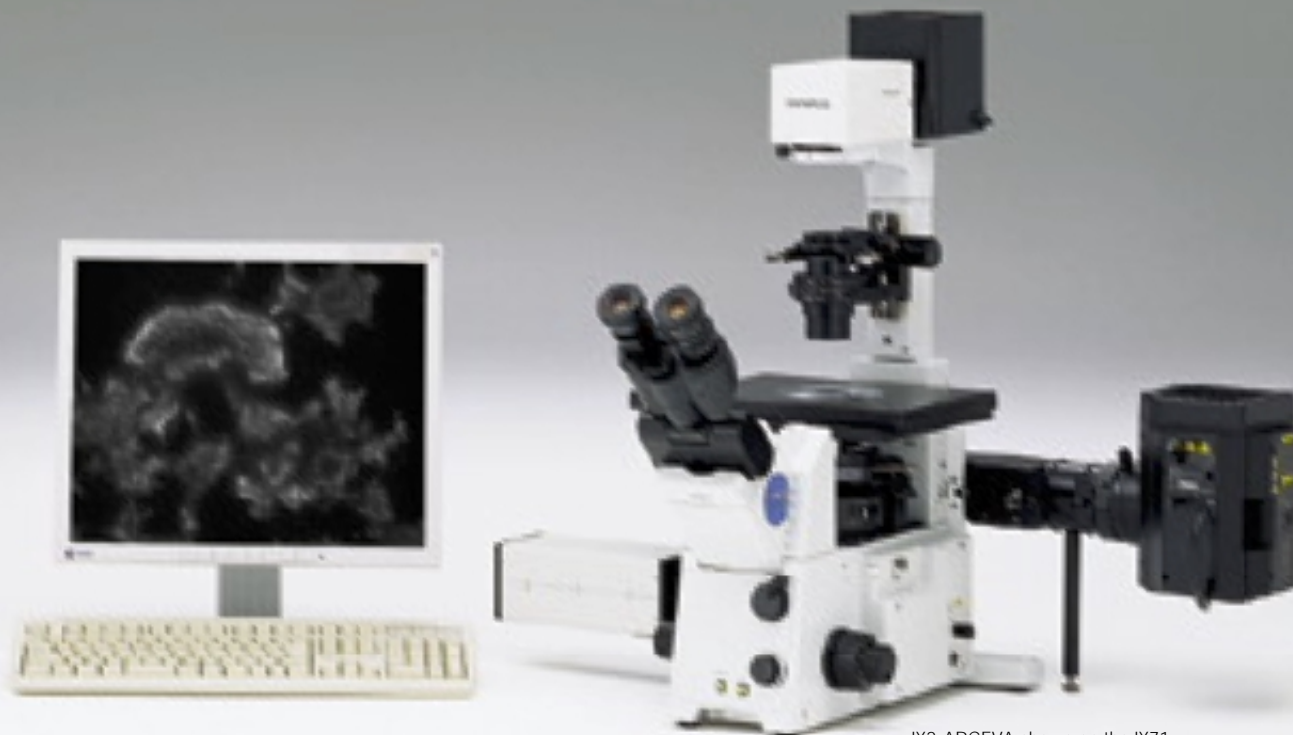
Conventional fluorescence observation



Total internal reflection fluorescence observation



Microtubule of an NG108-15 cell labeled with Alexa488 through indirect fluorescence antibody test



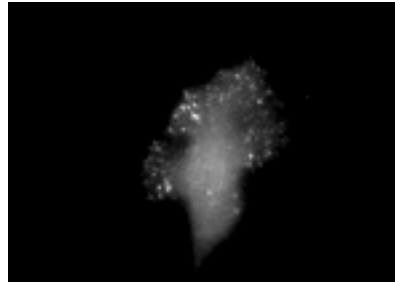
IX2-ARCEVA shown on the IX71

Featuring the Olympus-developed total internal reflection illumination system and slit mechanism to provide evanescent wave illumination from an arc lamp source. High signal to noise fluorescence observations with extremely thin optical sectioning can now be easily performed at the specimen-coverslip interface.

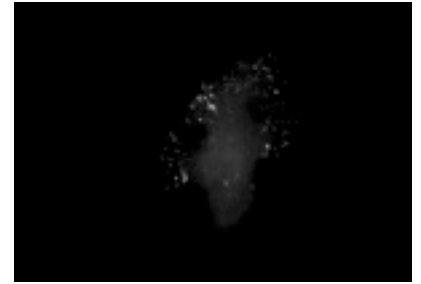
MODE OF OPERATION:

The arc lamp is focused on an off-center slit using a wedge prism. The light is then focused on the outer edge of the back focal plane of the objective thus causing the excitation light to exit the objective beyond the critical angle resulting in Total Internal Reflection. For normal fluorescence observation, the wedge prism and slit can be easily removed from the light path via a slider. Through the use of filters, this system enables a wider choice of excitation colors than is currently possible with wavelength-limited laser light sources.

Conventional fluorescence observation

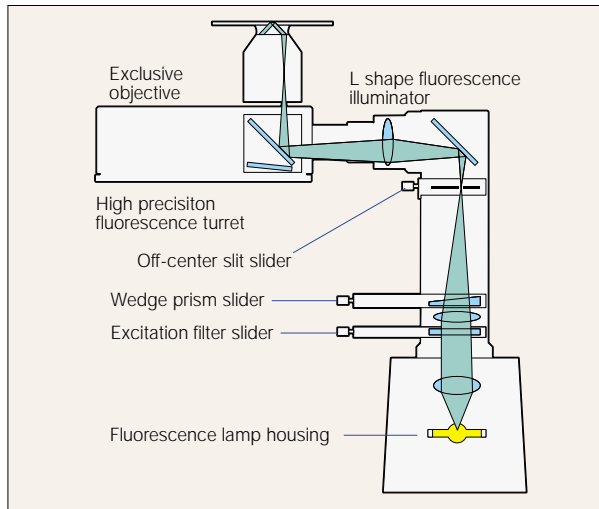


Total internal reflection fluorescence observation



Kaede-Crk II protein expressed on a HeLa cell

Photo sample: Courtesy of Dr. Kazuo Kurokawa, Tumor virus section, Microbiological Disease Research, Osaka University



IX2-RFACEVA



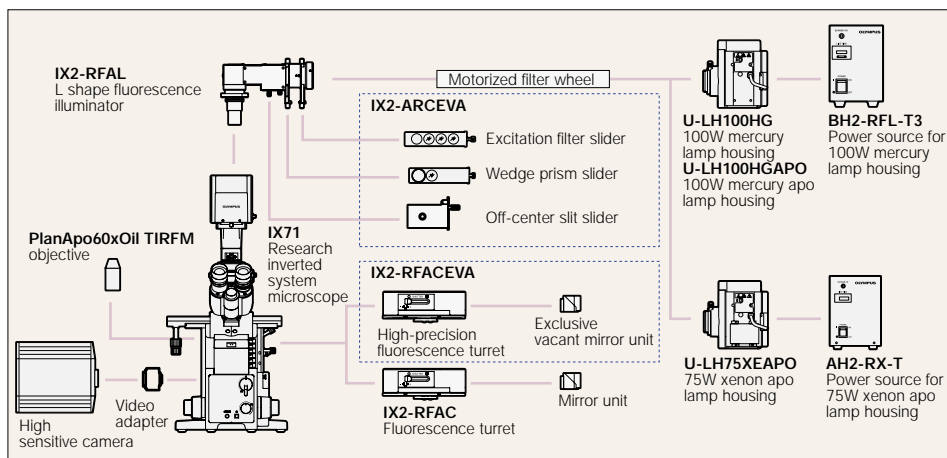
High-precision fluorescence turret IX2-RFACEVA

Turret includes three, highly precise, empty fluorescence filter cubes that permit dichromatic mirror switching while maintaining laser position on the back focal plane of the objective. This system makes multi-color observations easy and alleviates the usual adjustment of the laser when changing mirror units. Up to six mirror units can be installed.



IX2-ARCEVA

SYSTEM DIAGRAM



Main specifications

Microscope	Research inverted system microscope IX71
Fluorescence illuminator	Arc illumination total internal reflection fluorescence unit IX2-ARCEVA (Slit slider, wedge prism slider and excitation filter slider) L-shape fluorescence illuminator IX2-RFAL
Mirror unit cassettes (choose from either fluorescence turret)	High-precision fluorescence turret IX2-RFACEVA (with centering mechanism and 3 vacant mirror units) Fluorescence turret IX2-RFAC
Lamp light source	100W mercury lamp, 76W Xenon lamp
Objectives	PlanApo60xOil TIRFM N.A. 1.45, W.D. 0.15mm Used with normal cover glass and immersion oil
Stage	Left short handle stage IX-SVL2
Total internal reflection illumination F.N.	11
Observation	Recommend high sensitive camera

As of Oct. 1, 2003, Olympus Optical Co., Ltd. is named OLYMPUS CORPORATION.

Specifications are subject to change without any obligation on the part of the manufacturer.

OLYMPUS

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