

Olympus FluoView FV1000 Confocal Microscope

The Olympus FluoView FV1000 (C3) is an inverted IX81 laser scanning confocal microscope system equipped for specimens stained or labelled with up to 3 fluorophores of differing excitation wavelengths in multi-colour imaging.

It has a built-in lasers system controlled by high-speed Acousto-Optic Tunable Filters (AOTFs) that enable users to accurately regulate the wavelengths and excitation intensities of multiple laser lines simultaneously. This feature permits line sequential scanning to minimise channel cross-talk and region of interest (ROI) excitation which is essential for advanced fluorescence applications such as FRET, FRAP and photo-activation.

Features:

Incubation	Live cell imaging chamber with CO ₂ and temperature control
Imaging Modes	Epifluorescence and DIC illumination
Stage	Non-motorized XY stage
Scan Resolution	64 x 64 – 4096 x 4096 pixels
Detector	-Three simultaneous channels with highly sensitive low dark noise photomultiplier tubes (PMTs). -One TLD Bright field Detector

Objective lenses:

Magnification	Immersion	Type	Numerical Aperture	Working Distance (mm)
10X	Air	UPlanApo	0.4	3.10
20X	Air	UPlanAppo	0.7	0.65
60X	Water	PlanApo	1.0	0.17
60X	Oil	UPlanSApo	1.45	0.15
100X	Oil	UPlanApo	1.45	0.13

Laser module:

Description	Excitation (nm)	Laser	Power (mW)
DAPI	405	Solid state diode	50
FITC	473	Solid state diode	15
TRIC	559	Solid state diode	15

Software:

FV10-ASW