

#### **MF31-UV Fluorescence Microscope**



MF31 series fluorescence microscope adopting excellent quality infinity optical system combined with LED fluorescence illuminator. The LED fluorescence system is modular design, does not need external power box, it can offer fluorescence illumination. The microscope is good for entry level fluorescence observation such as immunofluorescence and bio-fluorescence, and bright field of biological slide. It is easy to operate, environment protect and high safety, widely used at school, university lab, medical center and science research institute.

### **Features**

Bright field and fluorescence
100% light division for eyepiece or PC
FN22 wide field eyepiece with high eyepoint
Workable UV fluorescence excitation
3W LED light for fluorescence
5W LED light for transmitted light color temperature around 4300K
Microscope stage with graphene surface, slide holder can hold double pieces slides at one time
Start to use with no preheating or cooling
Move among different color fluorescence and bright field by lever
With out external power box or lamp box, all in one design
Can expand to polarizing function, add thermal stage.

#### **Applications**

DAPI
Skin and foot fungus diagnose
Immunofluorescence
Water quality detection
Food safety control
Coating material analysis
Botany
Education





# MF31-UV standard configuration is with single Blue LED fluorescence excitation

Items	Specification
Optical system	Infinity optical system
Observation tube	Trinocular tube, triple lever
	30°inclined; Pupil distance 53~75mm
Eyepiece	WF10X/FN22mm
Fluorescence illumination system	3W UV LED
	EF:360-380nm /DM:>400nm /BF:>420nm
Nosepiece	Quadruple nosepiece with backward
Infinity plan Achromatic objective	4x/0.1W.D.=21.5mm
	10x/0.25 W.D.=7.5mm
	40x/0.65 W.D.=0.65mm
	100x/1.25 W.D.=0.185mm
Mechanical stage	Double layer moving stage, Graphene surface, Sizes: 210x140mm; moving range:76x50mm
Focusing system	Fine and coarse adjustment with tension and limited stopper, 2um scale, coarse adjustment circle moving range 40mm, fine adjusting circle moving range 0.2mm
	Total moving range: 24mm
Abbe Condenser	NA.1.25, Built-in aperture diaphragm
Transmission Illumination system	5W white LED, brightness adjustable
Camera interface	0.5x C-mount
Operating environment	Temperature: 5~40°C (41~104°F), Max. Relative humidity 80%, 31°C
Power Source	AC, 100-240V, 50~60Hz

## **Optional MF31 Items**

Items	Fluorescence excitation
MF31-RB	Royal blue :EX 420~480nm/ DM>500nm/ EF>510nm (works for Tuberculosis)
MF31-B	UV: EF 460~490nm/ DM>500nm/ EF>510nm
MF31-BG	Blue: EF 420-480nm / DM>500nm / BF>510nm Green:EF 510~550nm/ DM>570nm/ BF>590nm
MF31-BGU	Blue: EF 420-480nm / DM>500nm / BF>510nm Green:EF 510~550nm/ DM>570nm/ BF>590nm UV: EF 330~380nm/ DM>400nm/ EF>420nm
MF31-BGU-TRITC	Blue: EF 420-480nm / DM>500nm / BF>510nm Green:EF 510~550nm/ DM>570nm/ BF>590nm (works for TRITC/mCherry/TexasRed) UV: EF 330~380nm/ DM>400nm/ EF>420nm