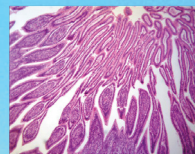




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LB-289 Motorized Automatic Fluorescent Microscope with Camera

LB-289 Motorized Automatic Fluorescent Microscope with Camera have been designed to present a safe, comfortable and precision observation experience. The motorized nosepiece, X-Y stage, condenser and auto focusing will make your works easier. The software has motion controlling, depth of field fusion, objective lens switching, brightness controlling, auto focusing, area scanning, image stitching, 3D imaging functions. Semi-APO objectives and B, G, U, V, R fluorescent filters are available for **LB-289 Motorized Automatic Fluorescent Microscope with Camera**. With perfectly performed structure, high-definition optical image and ergonomical operations, **LB-289 Motorized Automatic Fluorescent Microscope with Camera** realize professional analysis and meet all the needs of research in biological, medical, life science and other fields.



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APPLICATION

This motorized automatic microscope is an ideal instrument in biological, histological, pathological, bacteriology, immunizations and pharmacy field and can be widely used in medical and sanitary establishments, laboratories, institutes, academic laboratories, colleges and universities.

FEATURES

1. Adopt stepper motor and screw driving mode.



Adopting stepper motor and screw driving mode, the screw pitch is consistent and the positioning accuracy is high.

2. Tilting Trinocular Head.



- (1) The eye tube can be adjusted from 0° - 35° .
- (2) Digital cameras or DSLR cameras can be connected to the trinocular tube.
- (3) The beam splitter has 3-position (100:0, 20:80, 0:100).
- (4) The splitter bar can be assembled on the either side according to user's requirements.



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3. Motorized Objective Change.



Objectives could be switched by simply pressing the buttons. Users could also self-define two of the most commonly used objectives and switch between them with the green button.

The illumination has connection with the objective, when the objective is changed, the light intensity will also be changed accordingly.

4. Nosepiece Rotating Buttons.



This microscope has the function of motorized rotating nosepiece with the 2 buttons.

5. Motorized Swing-out Condenser.



The top-lens on the condenser will be automatically swing-in or swing-out according to the objective lens that is selected.



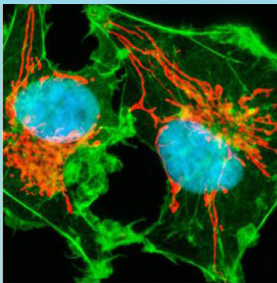
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6. Light Intensity Management.

The illumination has connection with the objective, when the objective is changed, the light intensity will also be changed accordingly. Thus, from low to high magnification, the field of view maintains the same brightness. There is no need to manually adjust the intensity of the light and also reduce eye fatigue. The long-life LED light source ensures uniform brightness while is easy to maintain.



7. 6-Position Turret for fluorescent filter blocks.



All the fluorescent filter blocks use the high-performance filter lens. Up to 6 filter blocks can be installed in the turret, that allows users to view different stained specimens with a turret.

Animal Fiber Cell



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8. Can be controlled by the control handle and controller, also can be controlled by software.



Control Handle



NMC-3 Controller

This microscope can realize LED brightness, objective lens switching, auto focus, and electric adjustment of XYZ axis through the NMC-3 controller and control handle. The software can realize depth of field fusion, objective lens switching, brightness control, auto focus, area scanning, image stitching, 3D imaging and other functions.

SPECIFICATION

| Item | Specification |
|----------------|---|
| Optical System | NIS60 Infinite Color Corrected Optical System |
| Viewing Head | Ergo Tilting Trinocular Head, adjustable 0-35° inclined, interpupillary distance 47mm-78mm; splitting ratio Eyepiece:Trinocular = 100:0 or 20:80 or 0:100 |
| Eyepiece | Super wide field plan eyepiece SW10X/25mm, diopter adjustable |



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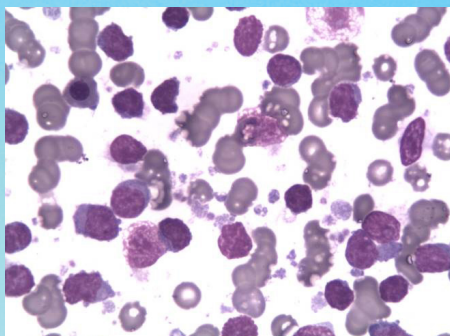
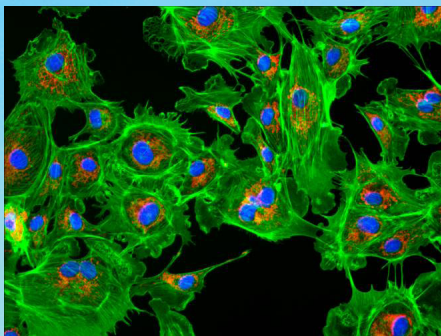
| | |
|------------------------------------|---|
| Objective | N-PLN 4X/NA=0.10, WD=30mm |
| | N-PLN 10X/NA=0.25, WD=10.2mm |
| | N-PLN 20X/NA=0.40, WD=12mm |
| | N-PLN 40X/NA=0.65, WD=0.7mm |
| | N-PLN 100X(Oil)/NA=1.25, WD=0.2mm |
| Nosepiece | Motorized Backward Sextuple Nosepiece (with DIC slot) |
| Condenser | Swing-out type condenser N.A.0.9/0.25(Auto) |
| Transmitted Illumination | 3W S-LED lamp, center pre-set, intensity adjustable |
| Focusing | Motorized auto focusing, fine division $0.1\mu\text{m}$, Max. speed 10 r/s, moving range: 30mm |
| Stage | Motorized double layers mechanical stage, size 275 X 239 X 44.5 mm; moving range 125mmX75mm (X-Y); precision: $0.1\mu\text{m}$, Max. Speed: 20mm/s |
| Reflected fluorescence illuminator | Turret with 6 filter block cubes position, with iris field diaphragm and aperture diaphragm, central adjustable; with filter slot and polarizing slot; with fluorescence filters (B,G fluorescent filters). |
| | 100W mercury lamp house, filament center and focus adjustable; with reflected mirror, mirror center and focus adjustable. |
| | Digital power controller, wide voltage 100- 240VAC |



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| | |
|-------------------|---|
| Control Handle | 3D control handle, 4 gears speed |
| Controller | Communication interface: USB2.0 and RS232 |
| Other Accessories | 0.5X C-mount Adapter |
| | Dust Cover |
| | Power Cord |
| | Cedar Oil 5ml |

SAMPLE IMAGE





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ACCESSORIES

1. N-PLN Series Plan Objectives.



The Plan objectives can provide flat high transmittance image from visible light to NIR light. They are usually used for bright-field viewing as the high signal-to-noise, high resolution and high contrast features.

1. N-PLN Series Plan Objectives.



These plan phase contrast objectives are specially designed for phase contrast observation. They are good choice for clinic and scientific research. These objectives can provide advanced flat image of 25mm FOV under transmitted bright field.



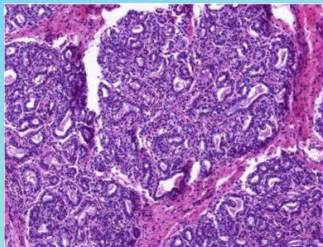
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3. N-PLFN Series Plan Semi-APO Fluorescent Objectives.



Owe to the multilayers coating technology, these Semi-APO objectives can compensate the spherical aberration and the chromatic aberration from ultraviolet and infrared light. High-sensitive fluorescence performance of the objectives ensures the sharpness, definition and color rendition of images.

4. Bright field Viewing.

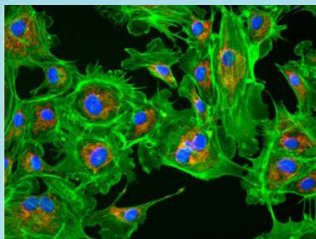


Mammary Gland (active stage)



Brighter image, high resolution and flatness, suitable for all the magnifications.

5. Fluorescent Viewing.



Arterial Cell

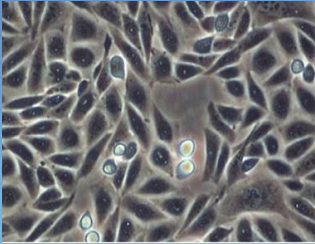


The compact epi-fluorescent components include noise elimination feature which ensures images captured are bright, with high contrast and high signal-to-noise ratio.



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6. Phase Contrast Viewing.

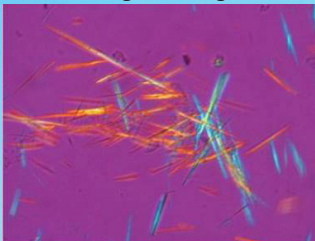


Rat Ovarian Cell



Users can get high contrast image of neutral background color whatever the magnification is. It is suitable for viewing non-stained specimen.

7. Polarizing Viewing.



Uric Acid Crystal



It is quite suitable for viewing collagen, amyloid and crystal etc., double refracting specimens.

8. Dark-field Viewing.



Spirogyra



It can be used for clearly viewing of blood or flagellum etc., fine structing.



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9. Multi Viewing Heads.



2 Viewing heads
(Face to Face)

2 Viewing heads
(Side to Side)

5 Viewing heads

10. Fluorescent filters.





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| Model | Description | Excitation | Dichroic Mirror | Barrier Filter |
|-------|-----------------------------------|--|-----------------|----------------|
| FL-B | B filter block | BP460-495 | DM505 | BA510 |
| FL-B1 | B1 filter block | BP460-495 | DM505 | BA510-550 |
| FL-G | G filter block | BP510-550 | DM570 | BA575 |
| FL-U | U filter block | BP330-385 | DM410 | BA420 |
| FL-V | V filter block | BP400-410 | DM455 | BA460 |
| FL-R | R filter block | BP620-650 | DM660 | BA670-750 |
| FL-O | Fluorescent Block without filters | Optional Excitation and Barrier Filters is $\Phi 25\text{mm}$, Dichroic Mirror is $5.8 \times 37.5/1\text{mm}$, the filters can be installed in the block. | | |



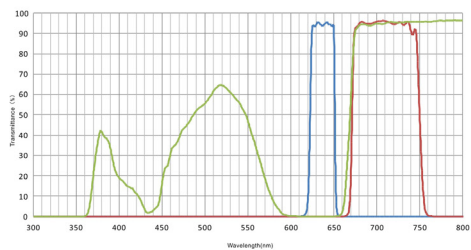
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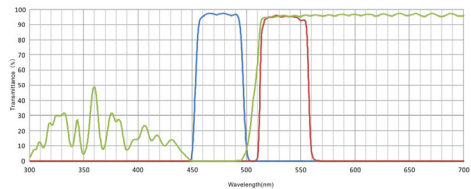
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Spectral range



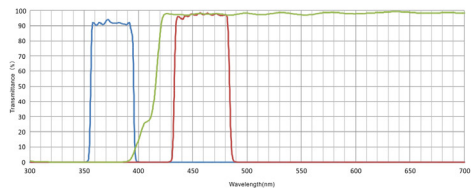
FL-R

- BP620-650
- DM660
- BA670-750



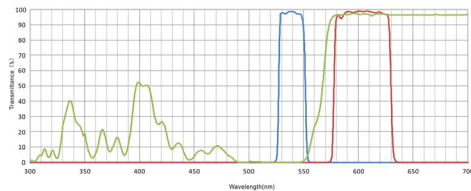
FL-FITC

- BP460-495
- DM505
- BA510-550



FL-DAPI

- BP360-390
- DM415
- BA435-485



FL-TRITC

- BP528-553
- DM565
- BA578-633