

BCF SERIES CONFOCAL MICROSCOPES

1. BCF296 Confocal Microscope 2
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1. BCF296 Confocal Microscope



BCF296

Introduction

As life science research demands deeper and broader analysis of tissues, organs and model organisms, efficient imaging solutions have become pivotal for scientific breakthroughs. Capturing images of such large samples requires expanding imaging ranges and reducing acquisition times to detect more accurate intracellular reactions. Following the legacy of its commercially successful predecessors, the BCF295 confocal microscopes, we proudly announce the triumphant upgrade completion of our all-new generation confocal microscope, the BCF296, specifically designed to meet the stringent requirements of modern biological research for high-throughput and high-quality imaging.

This upgrade not only marks significant advancements in optical systems, resolution, and acquisition speeds, but also introduces profound optimizations in intelligent operation and motorized design, transforming intricate experimental procedures into effortless tasks, thereby fulfilling the stringent demands of cutting-edge research across disciplines.

The BCF296 is equipped with an industry-leading 25mm field of view, effortlessly encompassing extensive sample areas for seamless large-scale imaging. With a scanning resolution of 8192*8192 pixels, it achieves vivid and precise imaging even at low magnifications. Its remarkable high-speed imaging capability of up to 60 fps (at 8*256 pixels) not only accommodates broad field observations but also delivers high-resolution imagery within a single frame, thereby gathering more data faster in each image.

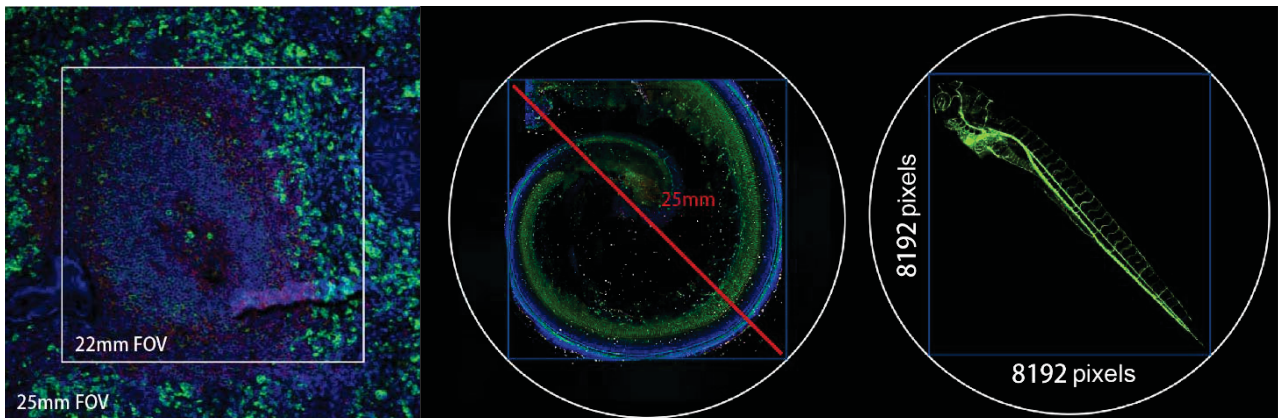
Larger fields of view, enhanced resolution, and increased speed translate to superior image quality, clearer contrasts, and truer colors. This empowers you to delve deeper into the nanoscale universe within cells, interpreting

cellular reaction processes more intuitively and accurately. It propels the boundaries of your scientific research forward, continually exploring uncharted territories in the realm of life sciences.

Feature

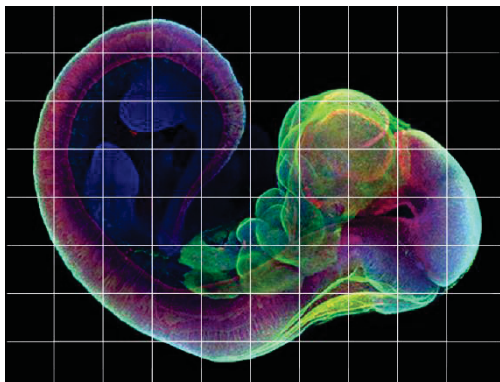
1. To extract more data from the sample

The BCF296 confocal microscope boasts an industry-leading 25mm field of view, enabling it to capture images of large samples in a single scan and offering 1.5 times the data throughput compared to previous generations. Coupled with a scanning resolution up to 8192*8192 pixels, it is designed to meet the escalating demands in life science research for analyzing tissues, organs, and live model organisms, ensuring the acquisition of vital biological data with unprecedented detail and efficiency.

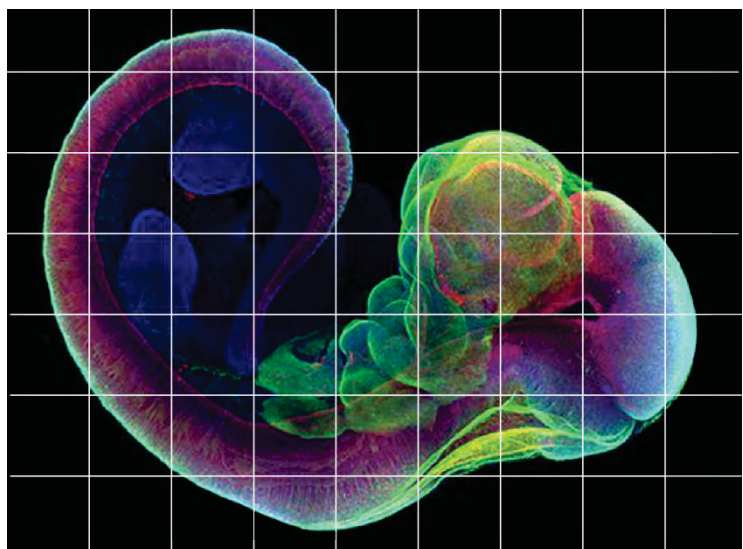


2. Requires fewer total images for large and high-resolution image stitching

When paired with the BS-2096 inverted microscope, the BCF296 is capable of acquiring high-quality 25 mm field of view (FOV) confocal images. The large field of view reduces the number of images required for stitching large images and decreases image acquisition time, enabling uniform brightness, high efficiency, and high throughput imaging of large specimens.



22mm FOV large image stitching



25mm FOV large image stitching

3. High-performance objectives for confocal imaging

The NIS series objectives boast high numerical apertures, long working distances, and exceptional chromatic aberration correction capabilities. Employing multi-layer coating technology, they deliver outstanding image quality and resolution. Not only do the NIS series objectives serve as an ideal complement to traditional optical microscopes, but they also play a pivotal role in confocal microscopy systems, enabling researchers to capture hitherto unseen fine structures and dynamic processes, thus facilitating in-depth exploration and visualization research of the microscopic world.



NIS Aplanomax TIRF 100X Oil

Boasting unprecedented ultra-high resolution with a numerical aperture (NA) up to 1.49, this objective lens represents the pinnacle of the NIS series. It is meticulously designed to optimize spherical aberrations produced under varying imaging temperatures, namely 23 degrees Celsius and 37 degrees Celsius.



NIS Plan Apo 20x C WI

The optimal choice for observing cultured cells and other specimens in culture medium, with a refractive index closely matching that of both the cells and the culture medium, thereby minimizing spherical aberration and light loss caused by refractive index differences to the greatest extent.

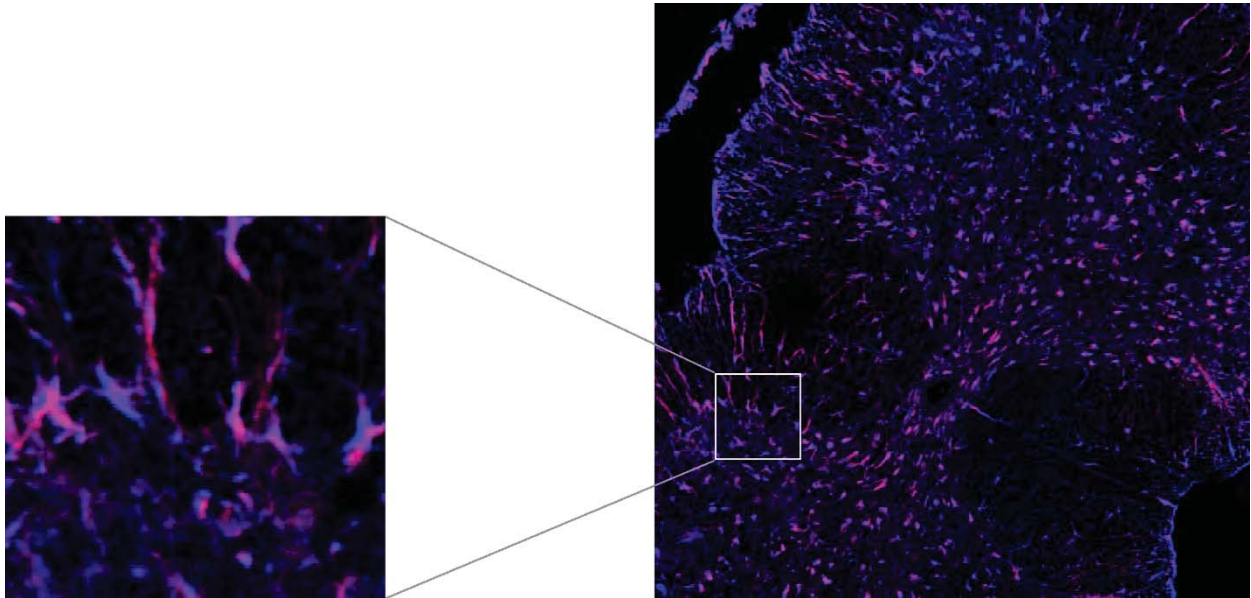


NIS Plan Apo series

Representing the apex of professional-grade objectives, with numerical apertures and working distances reaching new extremes, these lenses enable impeccable aberration correction across the entire field of view, offering imaging quality unparalleled by conventional objectives.

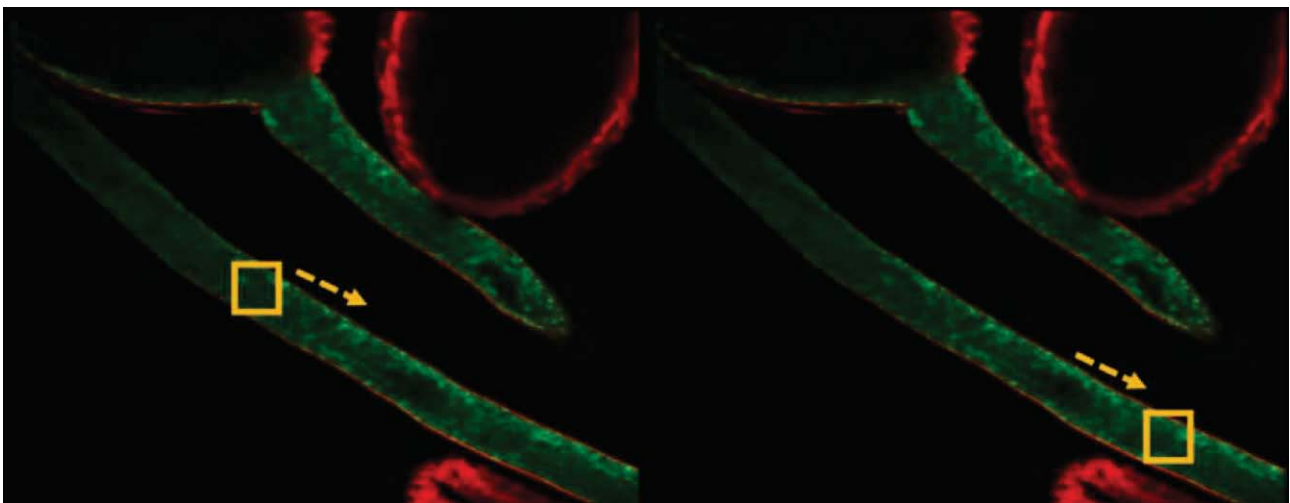
4. High-efficiency scanning heads and detectors

The BCF296 employs an internally integrated high-precision scanning galvanometer system within its scanning head, coupled with a continuously variable electric pinhole, enabling low noise, high contrast, and premium quality confocal imaging. With a scanning size of 8192*8192 pixels, it transcends the optical diffraction limit even when using low magnification objectives, achieving exceptional high-resolution sampling. This ensures the meticulous capture and reproduction of micro details.



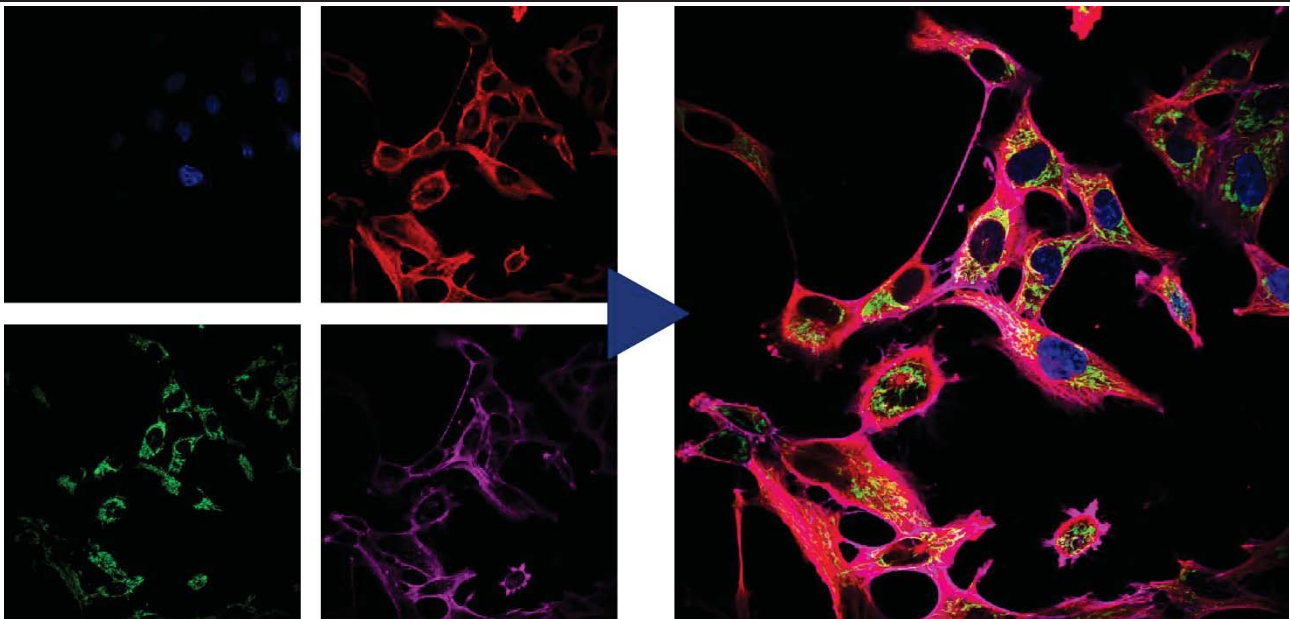
5. Faster scanning speed

Capable of high-speed imaging up to 60 frames per second (fps) at 8*256 pixels, reducing exposure time for samples under high light intensities and thereby significantly decreasing phototoxicity. This rapid imaging speed facilitates high-frequency data acquisition, enabling the capture of dynamic events and prolonged changes in samples, accurately and in real-time, fulfilling the complex and stringent imaging requirements of the life sciences domain.



6. Real-time four-channel synchronized imaging

The BCF296 confocal microscope incorporates cutting-edge four-channel fluorescence merging technology, empowering researchers to conduct real-time, synchronous, multi-channel precise fusion observations and captures. It allows for simultaneous detection and analysis of four distinct fluorescent labels within the same field of view, seamlessly switching and integrating multiple signals. Coupled with precise spectral unmixing imaging, this technology vividly and three-dimensionally reveals intricate, multi-layered information within samples, vastly enhancing experimental throughput and data accuracy.



7. A powerful and integrated software platform for advanced analysis and visualization

The confocal microscope adaptation software achieves a high level of integration and control over the hardware devices of the confocal system and the core functions of the microscope. It seamlessly combines these controls with confocal imaging analysis, creating a high-performance, user-friendly, all-in-one experimental solution. Whether faced with complex application scenarios or specific research demands, the software ensures a seamless workflow experience for users through its outstanding integration and flexibility, freeing them from cumbersome microscope operations and allowing for a more focused approach on the essence of experiments and innovative exploration.

High-speed hardware control

It empowers users with unprecedented convenience in operation, effortlessly digitizing management and enabling precise control over multiple electric components within the microscope, such as objective lens switching, focusing, condenser lens changing, and fluorescence module transitions.



Objective magnification, light intensity and spectral control



Fluorescence channel selection and observation mode control

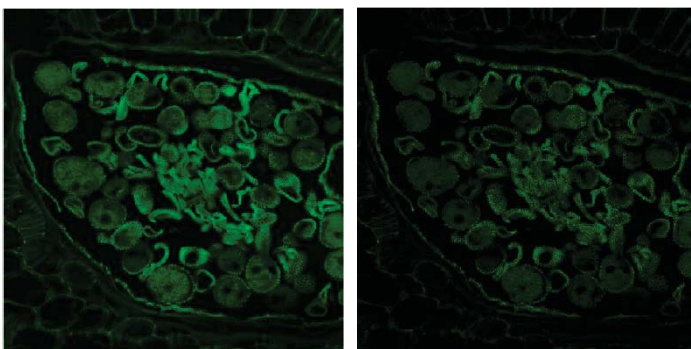
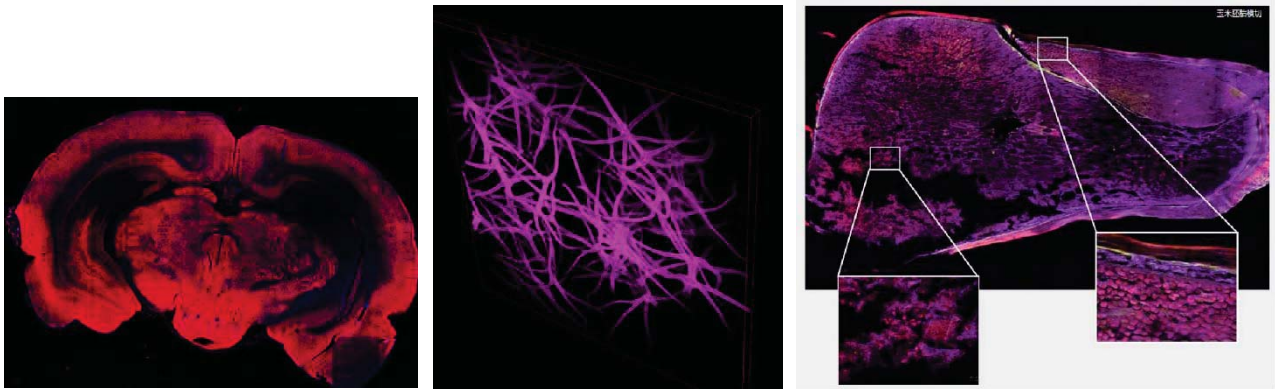


Stage control

Multi-dimensional imaging and image display

It is capable of memorizing custom observation modes and supports the combined use of X, Y, Z, λ , and T scanning functions. Equipped with a variety of flexible shooting modes, including multi-channel fluorescence imaging, time-lapse scanning, multi-position acquisition, Z-axis stacking, and panoramic stitching. These five modes can be freely

combined according to the user's actual needs, adapting to a wide range of complex and diverse experimental application scenarios.



Before Deconvolution

After Deconvolution

Deconvolution

This feature allows for deblurring of two-dimensional images. It facilitates multiple iterations of deconvolution to eliminate the out-of-focus noise components, known as speckle noise, in confocal images. Additionally, 3D deconvolution is applicable to multidimensional images, further enhancing image clarity and resolution across multiple axes.

8. High-performance confocal microscopy platform

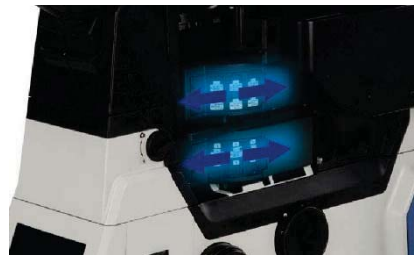
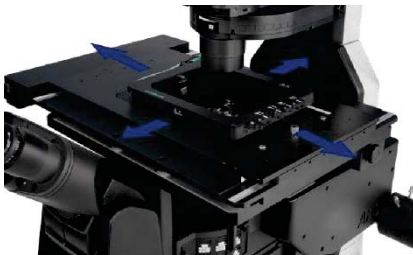
BS-2096 offers a powerful and flexible imaging solution, establishing a robust and highly expandable foundation for microscopic imaging within the BCF296 system. With its 25mm field of view design, it provides ideal observation conditions for large sample and high-throughput experimental research. Integrating various microscopical techniques such as brightfield, fluorescence, differential interference contrast, and phase contrast, users can freely opt for single-layer or dual-layer optical path configurations based on their specific experimental needs to achieve optimal imaging results. The Adaptive Focus Shift System (AFS) ensures precise focal plane positioning during continuous observations, thereby enabling stable, continuous, and clear recordings of cellular dynamic behaviors.



9. High-speed electric motor control



The operation and switching speed of objectives, filter blocks, XY stage, and observation modules have been significantly enhanced, creating an effortless operating environment that enables researchers to focus on daily observations and image capture. A joystick for intuitive manipulation of the stage allows the microscope to become an extension of your eyes and hands, making it user-friendly and natural to operate.



10. Living cell culture system

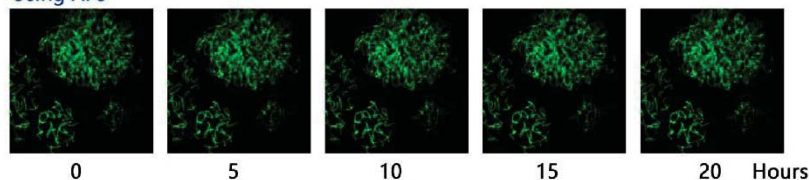


Specifically designed for precise live cell imaging, this system accurately regulates the microscope platform temperature, ensuring constant temperature, humidity, and CO₂ concentration within the culture dish, thereby providing an ideal cultivation environment for long term experiments.

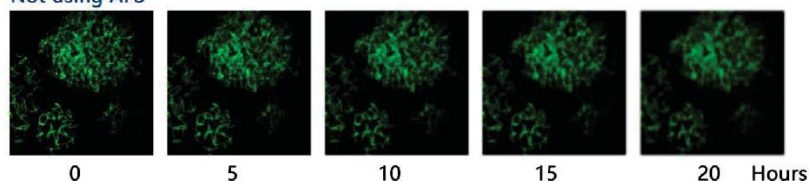
11. AFS ensures stable and reliable imaging performance

The BCF296 adopts an independent focusing design, minimizing the impact of other mechanical components on the Z-axis. It features a newly designed Adaptive Focus System (AFS), which intelligently eliminates focus drift. Whether paired with high-magnification objectives has large numerical apertures or utilized in conjunction with advanced imaging techniques such as super-resolution, confocal, or TIRF (Total Internal Reflection Fluorescence), the system consistently delivers crisp, sharp images. This design ensures the highest level of imaging stability and precision across a broad range of demanding applications in modern microscopy.

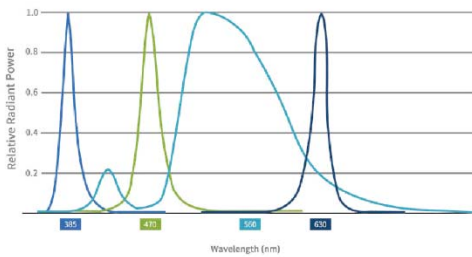
Using AFS



Not using AFS



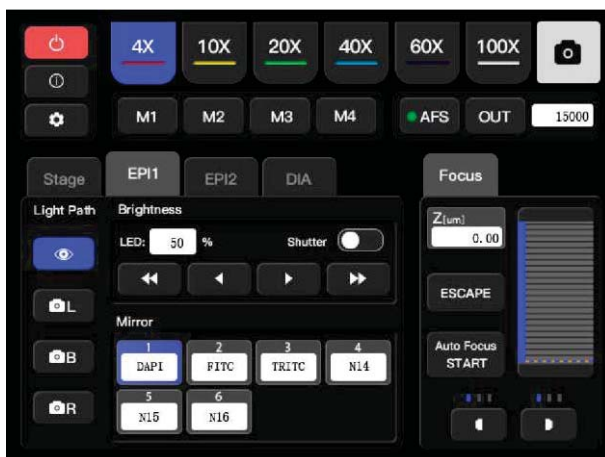
12. High specification LED fluorescent illumination system



The LED illuminator enables up to 4-channel LED illumination, offering high compatibility with commonly used fluorescent dyes in the market. It features concentrated excitation energy and high brightness, fulfilling the fluorescence imaging requirements of routine experiments. With instant-on capability, long service life, and no need for bulb replacement, it outperforms traditional mercury arc lamps in terms of reducing photobleaching and phototoxicity, making it particularly friendly to live cell samples. It is a sustainable, energy-efficient, and environmentally friendly microscope light source, ideal for low-carbon laboratory practices.

13. Interactive operation

BS-2096 innovatively incorporates a touch screen into its front panel, significantly enhancing user interface convenience and expandability of functions. It retains the traditional microscope knobs and buttons on both sides ensuring intuitive control even in dark laboratory environments, allowing researchers to concentrate on the core of their experiments without being hindered by complicated operations. This design promotes an efficient and seamless microscopy observation experience.



5.6inch touch screen

Control of components such as objectives, dual-layer/single layer fluorescence filter wheels, the condenser, light intensity, electric stage speed, electric Z-axis speed, host spectrometer ports, ESC exit, FN keys, and objective parfocality is achieved through the touch interface. It also provides real-time display of various statuses including objective magnification, transmitted illumination brightness, fluorescence wavelengths, output ports, XYZ positions, and movement speeds.

14. Large aperture observation optical system



Equipped with a large-aperture objective lens, it significantly increases light transmission, coupled with a spacious CMOS sensor, effortlessly enabling brightfield and fluorescence imaging across a vast field of view up to FOV25mm. This broader perspective captures more details, empowering you to comprehensively explore the microscopic world and have complete control over your scientific research endeavors.

15. Large aperture reflective fluorescence illuminator



Specifically designed for a large field of view (FOV) of 25mm, this fluorescence imaging illumination apparatus features a high-power LED light box, delivering broadband, high-transmission illumination encompassing the ultraviolet spectrum. It is also compatible with large-aperture fluorescent filters, ensuring high signal-to-noise ratio fluorescent images for detailed and accurate observations.

Specification

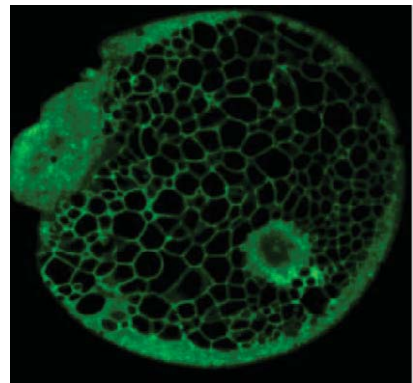
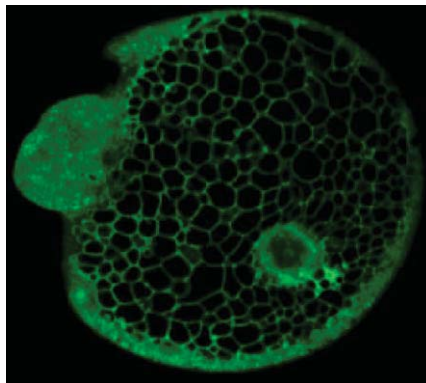
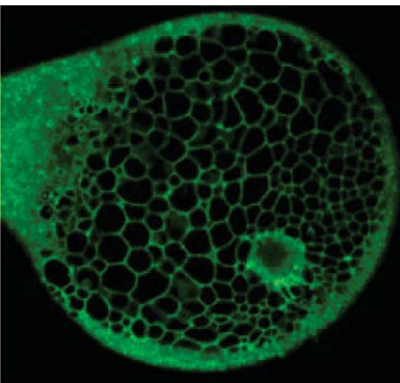
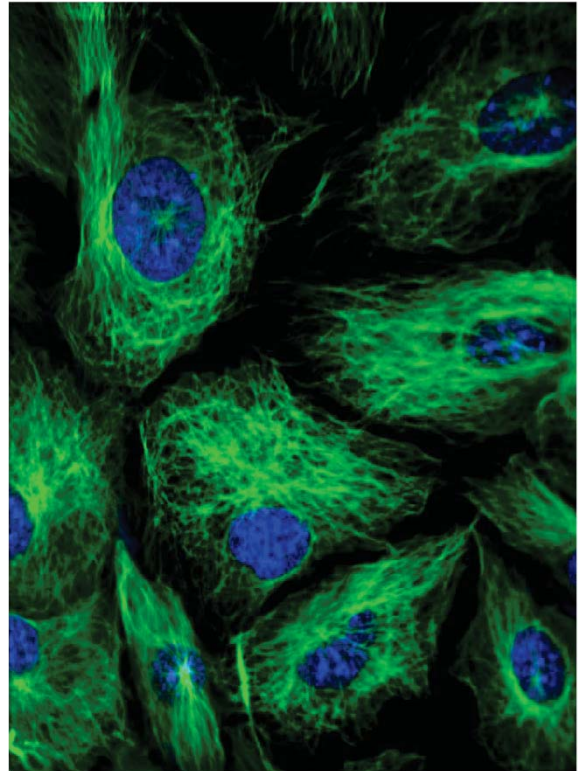
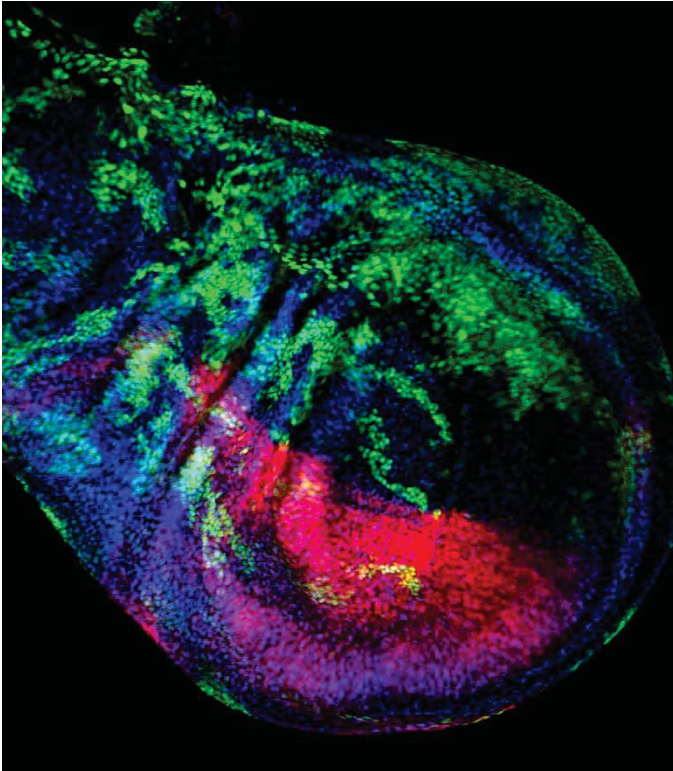
Item	Specification		BCF296
Optical system	Infinite optical system		●
Laser	Laser 405 nm, 488 nm, 561 nm, 640 nm		●
Detector	Standard detector, wavelength: 400-750nm, 4-channel PMT detector		●
	Transmittance detector, single channel PMT detector		○
Scanning head	Maximum pixel size: 8192*8192		●
Scan Mode	Supports combined use of X, Y, Z, λ and T scanning functions		●
Pinhole	Electric stepless adjustment		●
Confocal Field of View	Square inscribed in a Φ25mm diameter circle		●
Eyepiece	10X, adjustable diopter -5~+5		●
Viewing Head	Siedentopf binocular viewing head, 10-40° inclined, Interpupillary 47-78mm, eyepiece interface Φ30mm.		●
Objectives	Achromatic Plan Objectives	4X/ NA=0.16, WD=17.0mm, cover slip=0.17mm	○
		10X/ NA=0.45, WD=4.0mm, cover slip=0.17mm	●
		20X/ NA=0.75, WD=1.1mm, cover slip=0.17mm	●
		(Wi) 20X/ NA=0.95, WD=1.1mm, cover slip=0.11-0.23mm	○

		40X/ NA=0.95, WD=0.21mm, cover slip=0.11-0.23mm	•
		(Oil) 60X/ NA=1.42, WD=0.25mm, cover slip=0.17mm	•
		(Oil) 100X/ NA=1.45, WD=0.13mm, cover slip=0.17	○
		(Oil) 100X/ NA=1.49, WD=0.09-0.16mm, cover slip=0.13-0.19mm (23°C), 0.14-0.20mm (37°C)	○
Nosepiece	Motorized sextuple nosepiece with DIC expansion slot		•
	Motorized sextuple nosepiece with AFS module		○
Stage	Motorized control (grating type): Stage size: 445mm*300mm, travel range: 130mm*100mm, maximum speed: 25 mm/s. Positioning Accuracy: 0.1 μm. Repeatability: 0.5 μm. Equipped with a universal stage plate, compatible with 35mm-65mm culture dishes and slides, optional plate holder adapter available.		•
Condenser	7-hole turret condenser with electric control, NA0.55, WD26. 7 positions for phase contrast, Hoffmann phase contrast, DIC, ND filter.		•
Focusing System	Electric Z-axis, travel distance 10mm, precision 0.02μm, repeatability 0.1μm. Three-speed focusing knob: 2μm/revolution, 40μm/revolution, 200μm/revolution.		•
Illumination System	Transmitted Kohler illumination, 3W LED		•
	Epi-Illumination: Widefield 4-band LED illumination. 6-Position electric fluorescence turntable (standard for B, G, U). Motorized Fluorescence Shutter.		
Ports	Beam splitter ratios: eyepiece 100% or left port 100% or right port 100% or eyepiece: right port=20:80.		•
Intermediate Magnification	Manual 1X, 1.5X switching		•
DIC Plate	10X, 20X, 40X, 60X, 100X objective Inserts, compatible with the nosepiece turret		○
Power control box	X/Y/Z-axis electric control. Display objective magnification, fluorescence band and other states. Shortcut key settings.		•
Image Bit Depth	16 bits		•
Camera	Specialized camera		•
Software	Software: Featuring confocal scanning capabilities, multidimensional imaging, and pre-set channel functions, this software supports both wide-field and confocal imaging modes. It offers comprehensive hardware control modules, built-in image filtering tools, and supports export to various image formats, providing users with advanced imaging processing and management options.		•
PC	Computer workstation: a set of HP workstations or similar performance workstations. (1) HP Z840/CT Workstation/English OS Windows 7 64bit Professional Edition (2) CPU: Intel Xeon E5-26434C 3.30 10MB 1600 x 1 or similar performance (3) RAM: 32GB DDR -1600 ECC or similar performance (4) HDD: 1TB 7200 RPM SATA 1ST HDD or similar performance (5) 16X SuperMulti DVDRW SATA 1st ODD or similar performance (6) Display: 2PCS ≥20 inch LED backlit widescreen IPS LCD displays.		•

Expandable Functions	Live Cell Culturing System Super-Resolution Structured Illumination Microscopy (SR-SIM) Module Dual-Layer Fluorescence Heightened Accessor	○
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Note: ● Standard Outfit, ○ Optional

Sample Image



2. BCF297 Laser Scanning Confocal Microscopy



BCF297

Introduction

BCF297 is a newly launched laser scanning confocal microscope, which can achieve high-precision observation and precise analysis. It can be widely used in morphology, physiology, immunology, genetics and other fields. It is an ideal partner for cutting-edge biomedical research.

Feature

1. High signal-to-noise ratio

High-efficiency confocal imaging optical path can provide fluorescence images with extremely high signal-to-noise ratio even under weak fluorescence.

2. Excellent image

Wide spectrum, high numerical aperture lens, perfect for shooting various types of confocal samples.

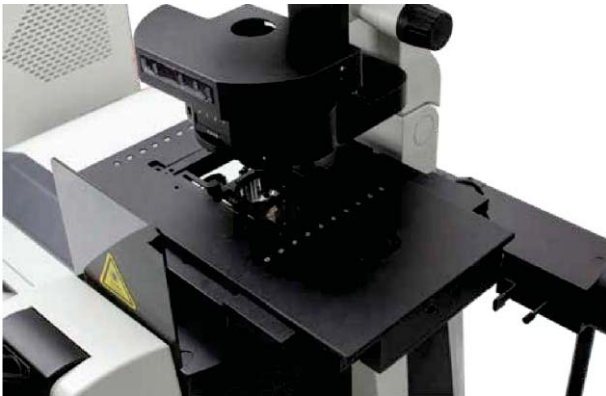
3. Easy to use

Fully automatic stage, paired with an intuitive human-machine interface, allowing you to do a job with ease during sample shooting.

4. All motorized control system

The Z-axis of BCF297 laser confocal microscope adopts a motorized device, which can quickly adjust the Z-axis height according to the real-time image. AF one-key autofocus, eliminating the need for fine-tuning steps and improving work efficiency. Integrated control buttons on both sides of the frame, can quickly switch or rotate the condenser, brightness, objective lens, attenuator disc and fluorescence disc, to improve the operation convenience.

5. High-speed, high-precision stage



The stage ensures exceptional stability and precise positioning for detailed sample control during observation. It enables fast and smooth scanning, significantly enhancing data acquisition efficiency and image quality. It's the ideal choice for scientific research requiring both efficiency and precision.

6. Front LCD panel



It is able to display the status of electric parts in real time, and set the observation mode, switch the light brake, etc. It greatly improves the user experience and makes the research work more convenient.

7. Multiband LED fluorescence illumination system



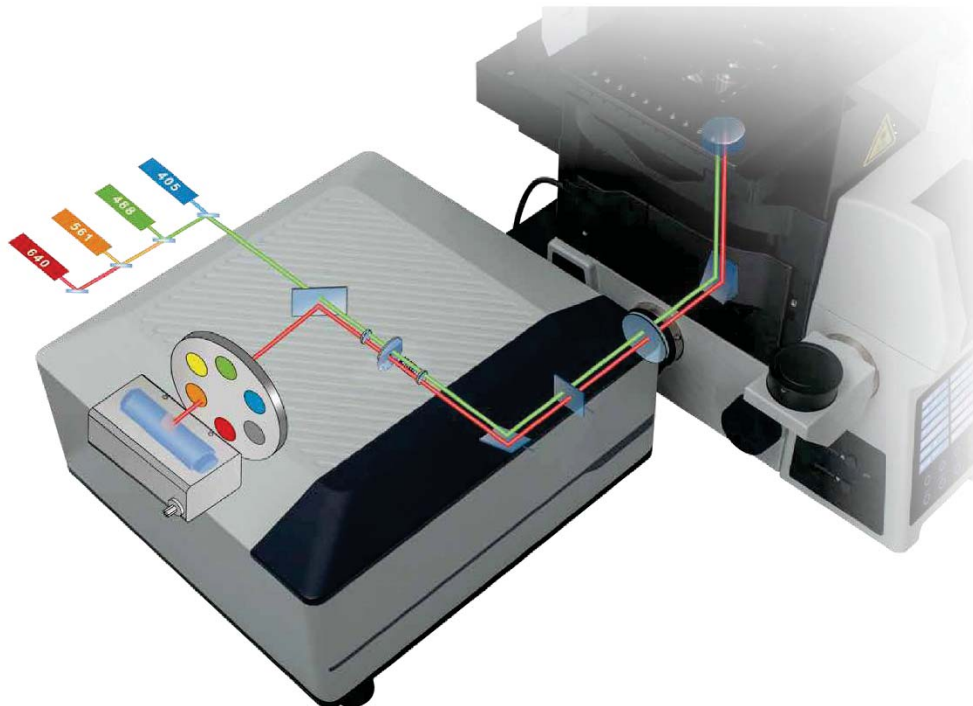
Equipped with multiple excitation channels for quick switching, this system adapts perfectly to different experimental needs. The advanced light intensity control technology ensures optimal illumination every time. Coupled with its long-lasting durability and intelligent SDK control, it takes your scientific exploration further. Additionally, it supports live-cell observation expansion.

8. High scalable



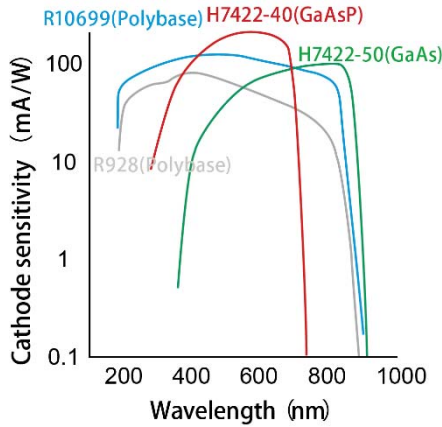
The big frame provides sufficient space for third-party configurations. Single-layer optical path or double-layer optical path can be selected as required. It can be loaded into 16 filters at most, providing maximum scalability for the in-depth research. It supports live-cell observation expansion.

9. Distinguished Confocal Imaging Optical Components



Innovative confocal pinhole unit

Pinhole design is based on the principle of light reversibility. The excitation light of the lamp and the emission light of the sample pass through the same pinhole, and they keep a 100% conjugate relationship. It not only ensures the acquisition efficiency of fluorescence signal, but also improves the filtering of non-focal plane signal, for the higher detection sensitivity and better image resolution.

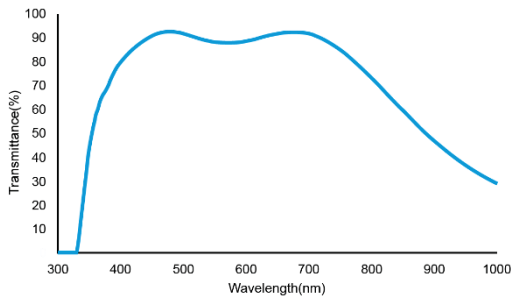


Controller detection unit

The new generation of highly sensitive GaAsP technology enables automated multicolor confocal fluorescence imaging, allowing researchers to perform detailed analysis of complex samples more easily and quickly.

10. SAPO series super apochromatic objectives

Converging the optic axes of red, green and blue to one focal plane, correcting the axial chromatic aberration of violet light, the original color of samples such as red/green/blue is able to be presented. The resolution and brightness are improved based on large numerical aperture. Wide spectrum correction ensures flat field and increase the color difference correction range from 400nm to 1000nm.



SAPO 60X transmittance curve



11. Special software for laser confocal

This system is equipped with high-sensitivity, high-resolution, and high-efficiency imaging technology, meeting the diverse needs of complex data acquisition. The software supports multichannel acquisition, Z-stack imaging, and large fluorescence image stitching, providing users with a comprehensive imaging solution. For image processing, the software integrates functions such as image fusion, image enhancement, 3D reconstruction and dynamic image generation, significantly improving image presentation quality. In terms of image analysis, the software offers advanced features like optical density analysis and colocalization analysis, delivering a professional and powerful user experience.

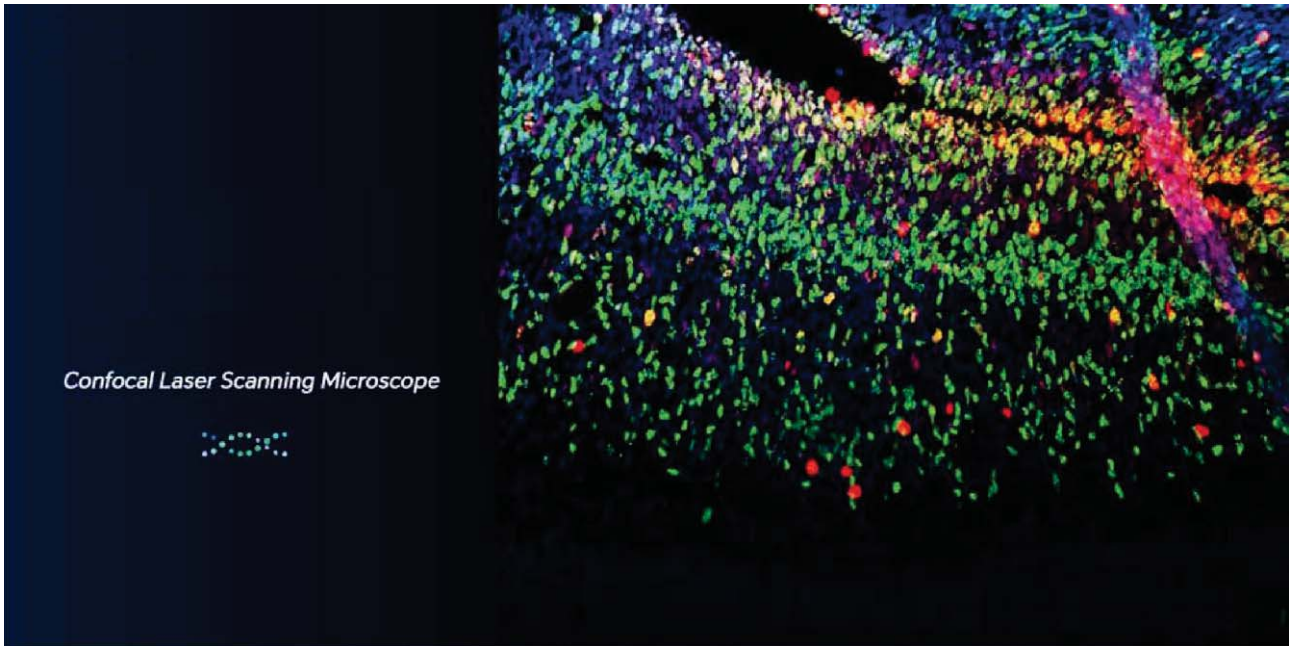
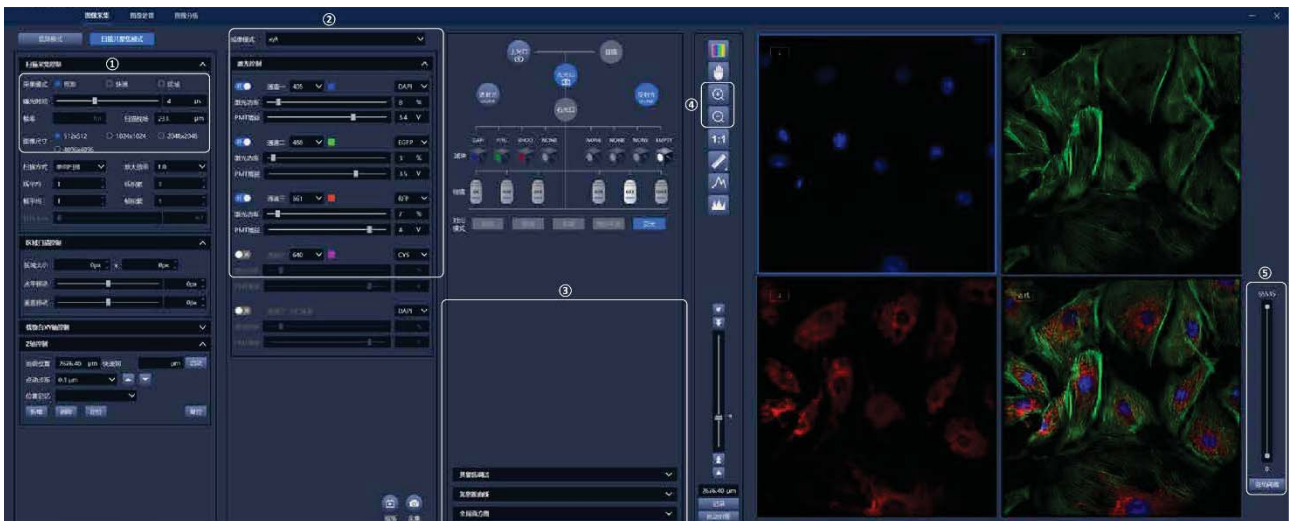
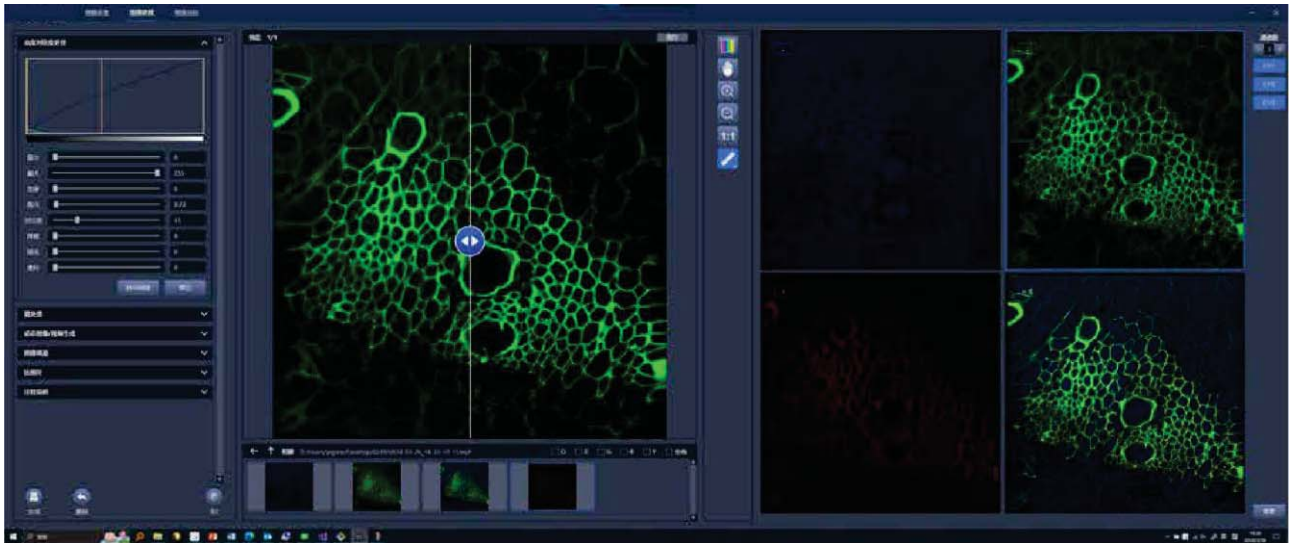


Image acquisition



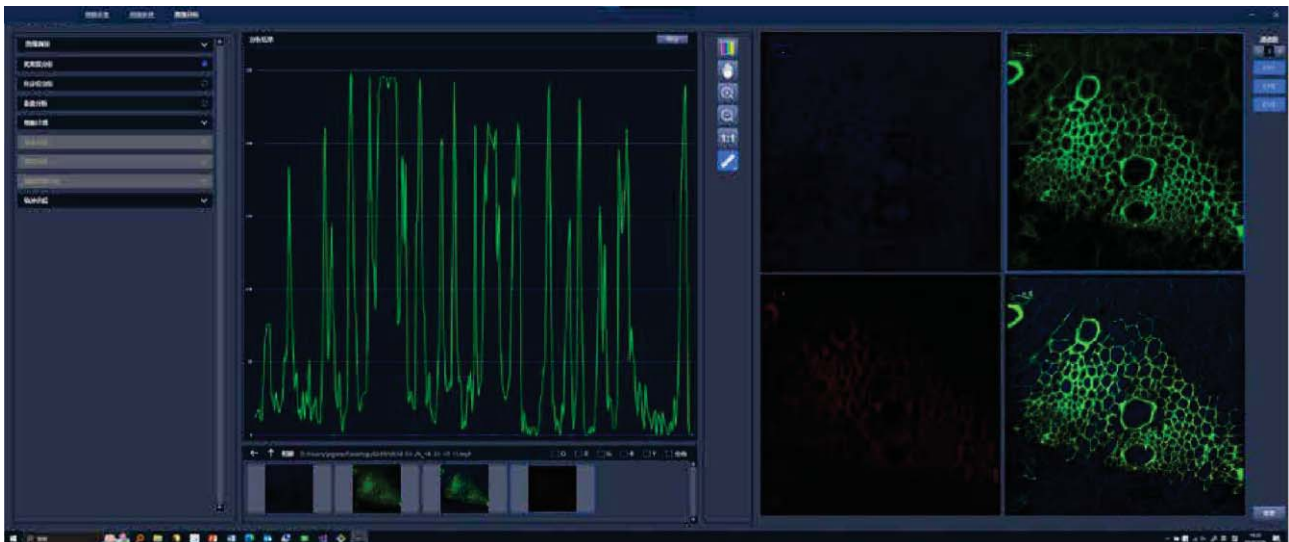
- ① This module allows users to freely adjust confocal scanning parameters, including scanning speed, image resolution, magnification, laser power and gain, to suit different samples and experimental needs.
- ② Achieve six-dimensional (x, y, z, λ, t) imaging, capturing comprehensive sample information.
Provide various custom acquisition modes, such as xyz, xyzt, xyzt, xyλ, xyλt, xyzλt, to meet different experimental requirements.
Support real-time stitching of large images, seamlessly integrating multiple fields of view for a complete view.
Enhance image depth perception through depth of field extension technology.
Apply pseudo-color marking in real-time to improve the visual effect and interpretability of images.
- ③ Support real-time optical density measurement for analyzing the transparency characteristics of samples.
Provide real-time histogram display to understand the statistical distribution of images instantly.
- ④ Allow users to zoom in on images for detailed observation or a general overview.
- ⑤ Intelligently adjust histogram thresholds to achieve optimal image contrast.

Image processing



- Support advanced 3D reconstruction and visualization, bringing three-dimensional structures to life.
- Ensure accurate overlay of multi-channel images through precise colocalization processing.
- Synchronize analysis of multiple marker points through colocalization linkage.
- Provide diverse image editing tools, including flipping, mirroring, and background removal.
- Generate dynamic image sequences to capture biological events in the time dimension.
- Stack processing function supports three-dimensional reconstruction and time series analysis.
- ROI (Region of Interest) processing focuses on detailed analysis of specific areas.

Image analysis



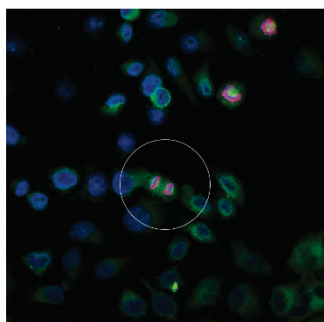
- Provide a series of morphological parameter analyses, including perimeter, area, roundness, etc.
- Measure the highest and lowest grayscale values of images to evaluate the contrast range.
- Perform colocalization analysis to quantify spatial relationships between multiple markers
- Count cells and particles for various quantitative analysis experiments.

Application

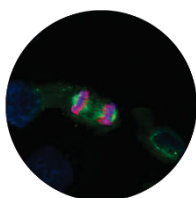
1. Biological and life sciences

Cell biology

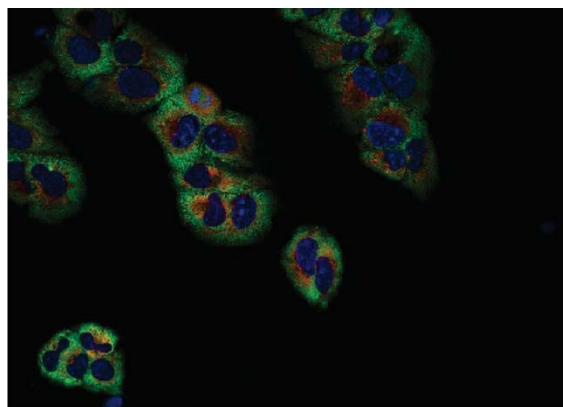
BCF297 is able to accurately image all cells labeled with various fluorescent proteins and multi color probes, studying the fluorescence colocalization, dynamic properties and spatial relationships of two or more target proteins. Besides, BCF297 can achieve the morphological structure of 3D cell culture such as organoids/globules by 3D reconstruction, finding out more hidden information.



HELA Cell (Peking University Health Center)

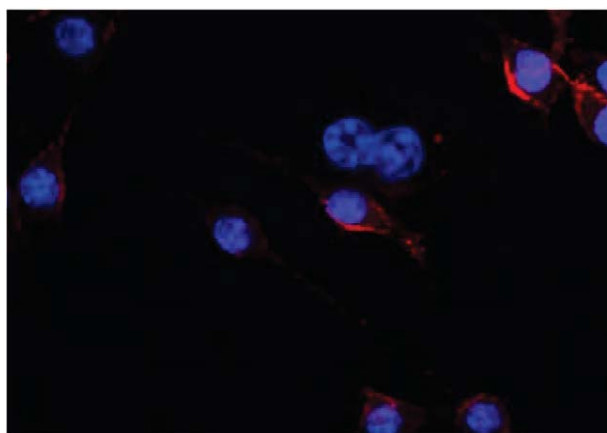


60X



Human hepatocytes (Zhejiang University) 40X

Biochemistry and molecular biology



Iba-1 Cells (Harbin Medical University)

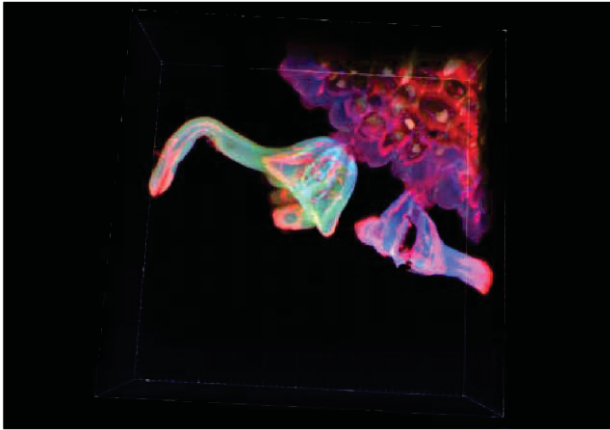
BCF297 is a powerful tool for studying molecular and protein interactions, intracellular signaling pathways, and gene expression. It provides precise quantitative data on the exact locations and dynamic processes of these biomolecules within cells.

Published in: <The Journal of Nutritional Biochemistry>.

Image source: Department of Child and Adolescent Health, Public Health College, Harbin Medical University

Development biology

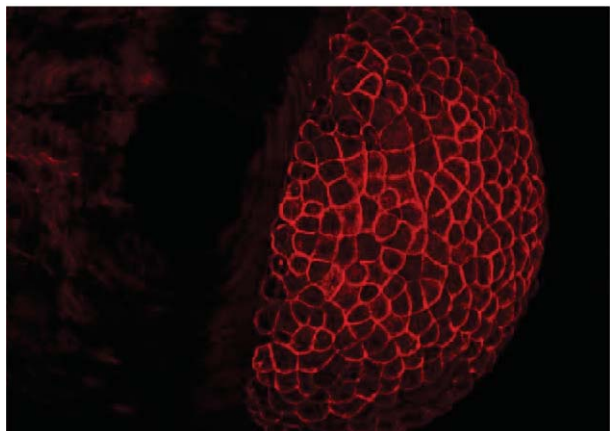
BCF297 is ideal for observing model organisms, such as zebrafish and fruit flies, which have large, complex and dense structures. BCF297 is suitable for non-destructive imaging, with its wide-field imaging and layer scanning functions helping to obtain detailed structural images of samples and present details from different depths of the sample, aiding development and growth research.



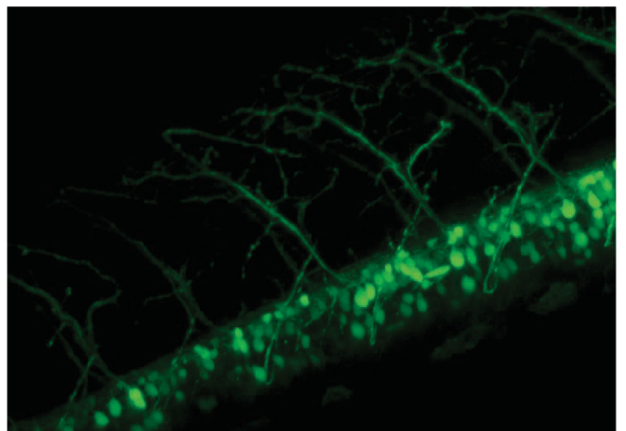
Dicotyledon stem (Huazhong Agricultural University) 60X



Arabidopsis root (Huazhong Agricultural University) 40X



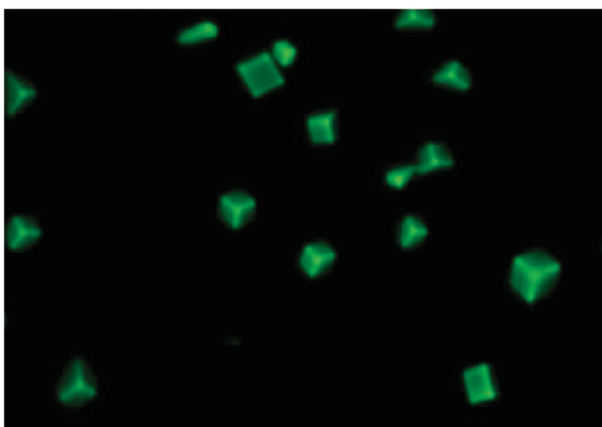
Zebrafish embryo (West China Hospital) 20X



Zebrafish nerves (West China Hospital) 40X

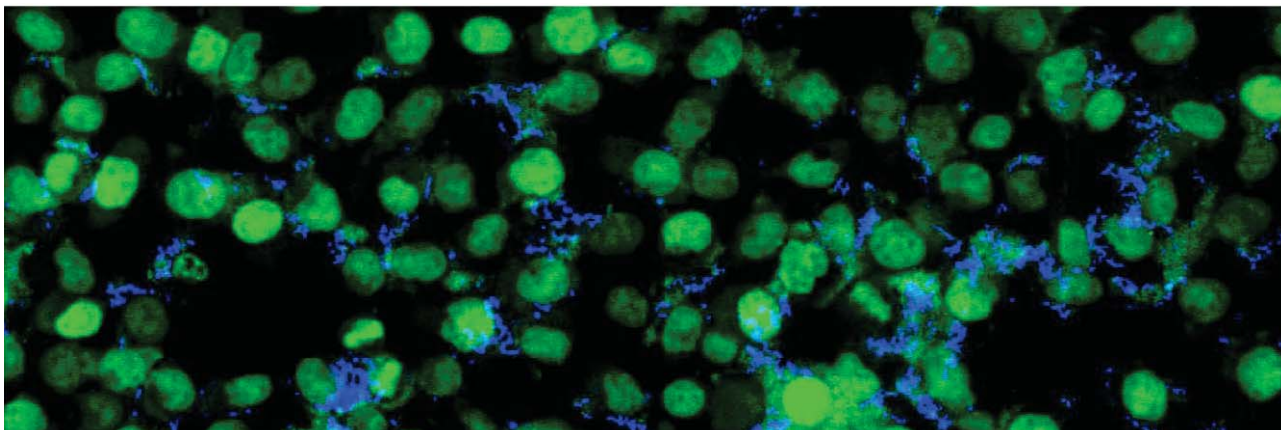
2. Materials science

Biomaterial



Functional materials (Wuhan University of Technology) 60X

In the field of bio-photonics, the research heat of biological information and nanomaterials is increasing. In the study of photoelectric materials, BCF297 with the living cell environment monitoring can cooperate with the living cell environment monitoring module to observe the process of interaction between materials and cells for the fusion of new functional materials, inorganic nano hybrid materials and living cells.

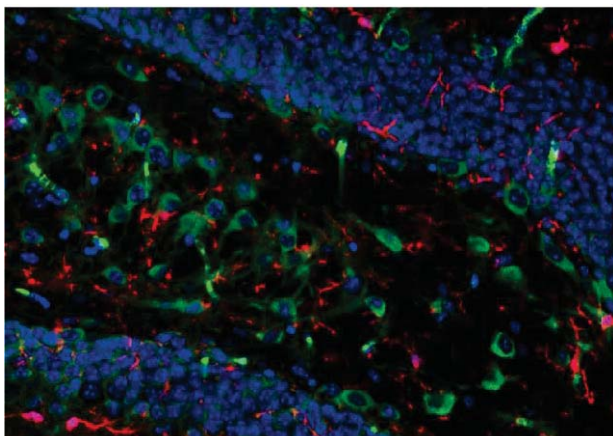


293T cells (Wuhan Polytechnic University)

Published in: Colloids and Surfaces B: Bio interfaces

Image source: Chen Xin Research Group, Wuhan Polytechnic University

3. Medical and pharmacological



Hippocampal slice (Chinese Military Academy of Science) 40X

Pharmaceutical Chemistry

Can be used to study the mechanisms of drug actions in cells and tissues and screen for new drug candidates.

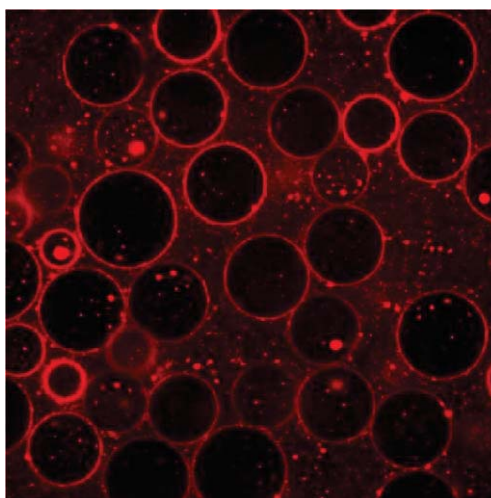
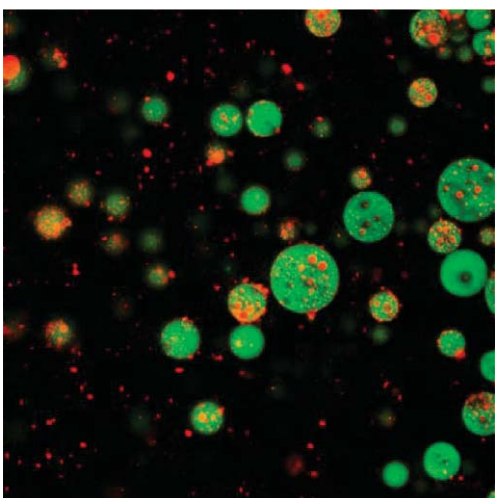
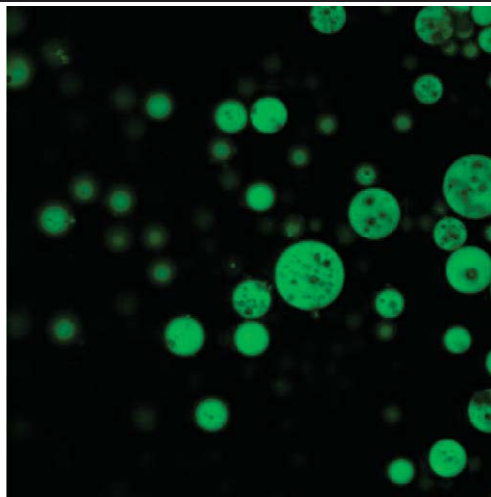
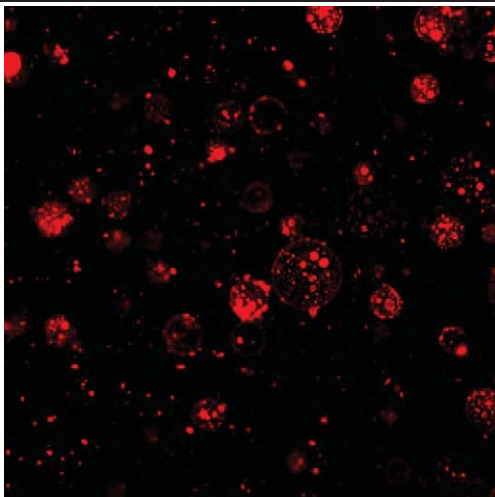
Pathology

The layer scanning of BCF297 is suitable for different histopathological sections of animals and plants, especially for large tissue. Much more details and more accurate data are available.

4. Agricultural, forestry and food science

Food safety and quality control

Utilizing its advanced imaging technology, BCF297 provides excellent resolution and image clarity, effectively reducing background signal interference and enhancing image contrast. This ensures clear observation even with complex or opaque samples such as high internal phase emulsions (HIPEs). The brightness and penetration of its laser light source offer significant advantages for in-depth analysis and understanding of these challenging samples.



High Internal Phase Emulsions (HIPEs) (Xihua University)

Published in: Food Hydrocolloids

Published in: Food Research International

Image source: Professor Chen Xianggui's Research Group

School of Food Science and Engineering, Xihua University

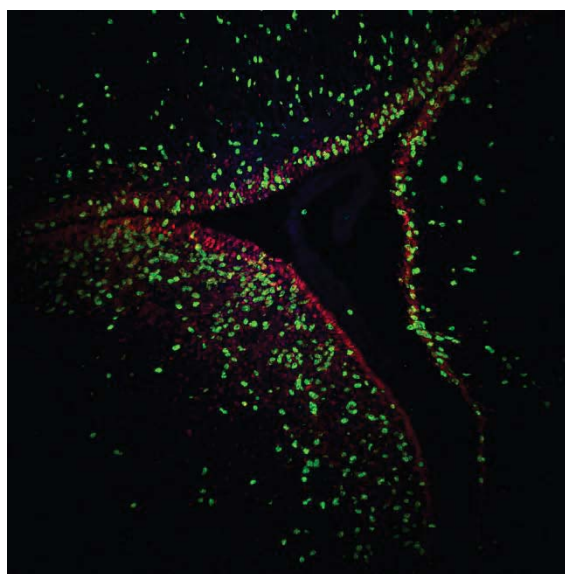
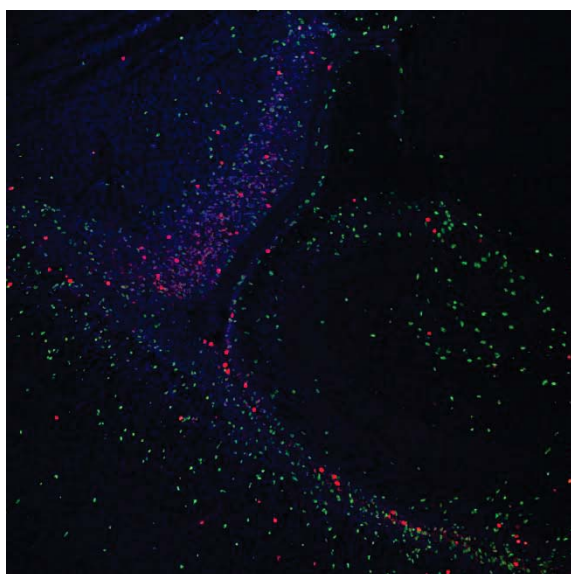
Specification

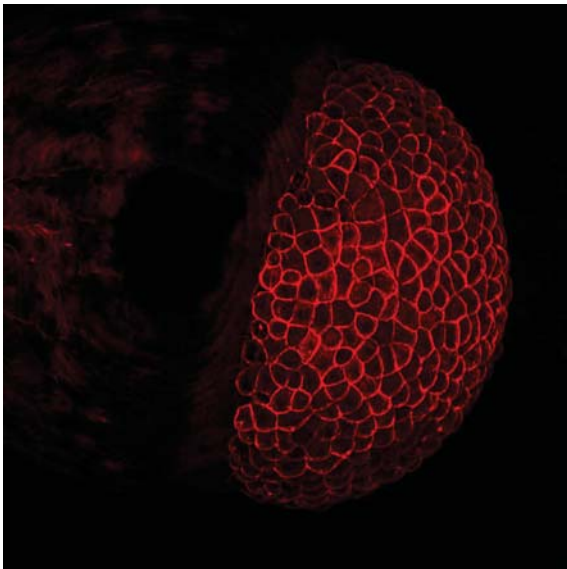
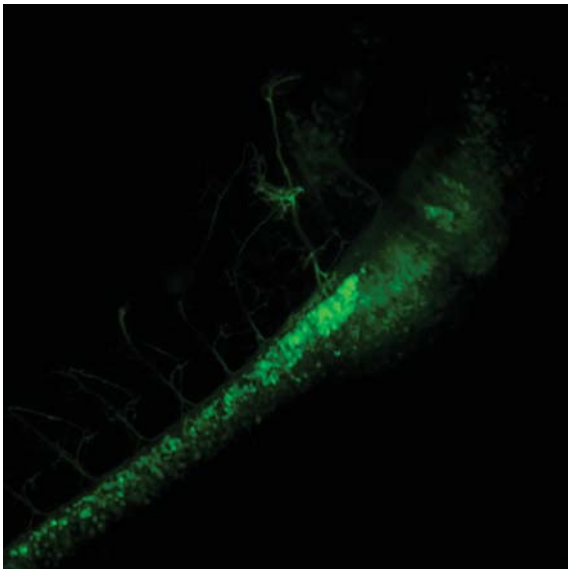
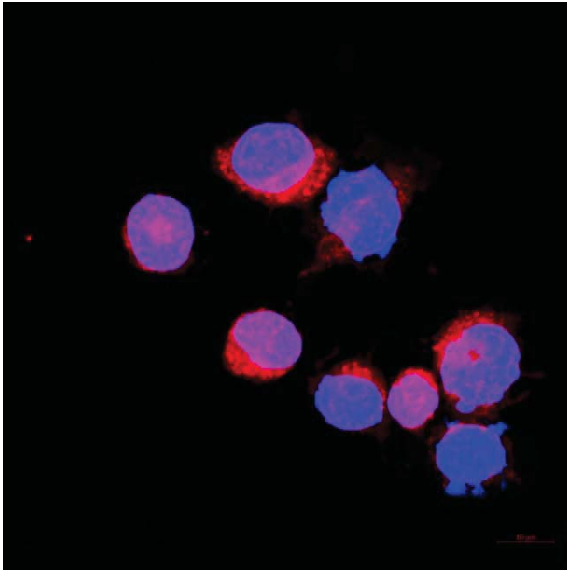
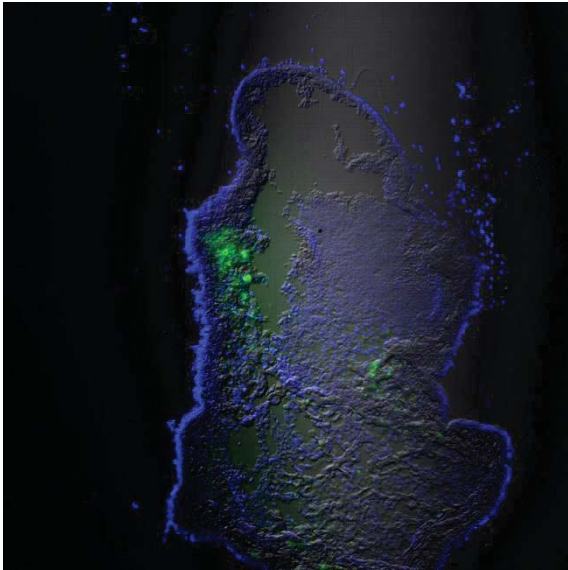
Item	Specification
Laser	405nm, 488nm, 561nm, 640nm
Scan Unit	High speed optical scanning galvanometer
	Field of view: (≥20)
	Scanning element: 512*512-8192*8192
	Pixel time: 0.5μs-10μs
	Standard scanning speed: 3fps (512*512)
	Scanning: 1X-50X
Pinhole	35/45/55/65/85/105μm
Probe Unit	Multi alkali PMT, QE≥25%@500nm
	GaAsP PMT, QE≥45%@500nm

Optical System	Infinity Color Correction Optical System	
Viewing tube	20-45° tilting binocular head, inverted image	
Eyepiece	High eyepoint wide field plan eyepiece PL10X/22mm, diopter adjustable, micrometer attachable	
Microscope Body	Low position coarse and fine coaxial electric focusing mechanism, range 10.5mm, precision: 0.01μm	
Stage	Stage size: 350mm (X)*200mm (Y), moving range: 114mm (X)*75mm (Y), maximum speed: 50mm/s, with slide holder and Φ36 petri dish holder.	
Objectives	Infinity Plan Super Apochromatic Objectives	10X/NA=0.4, WD=3.1mm
		20X/NA=0.8, WD=0.6mm
		40X/NA=0.95, WD=0.18mm
		(Oil) 60X/NA=1.42, WD=0.17mm
		(Oil) 100X/NA=1.45, WD=0.13mm
Condenser	Electric seven-hole condenser, NA=0.55	
Transmitted Illumination	10W LED transmitted illumination	
Fluorescent Module	Fluorescent illumination, 8-hold fluorescence rotating system, supporting up to 16 wells	Multi-band LED light source module, 10W high- power LED
		Fluorescent mercury lamp light source module, 100W DC mercury lamp
DIC Imaging	DIC detector	
Camera	5MP/20MP camera	
Operating Software	Image acquisition, image processing, image analysis, including functions such as large image stitching, 3D reconstruction and cell counting.	

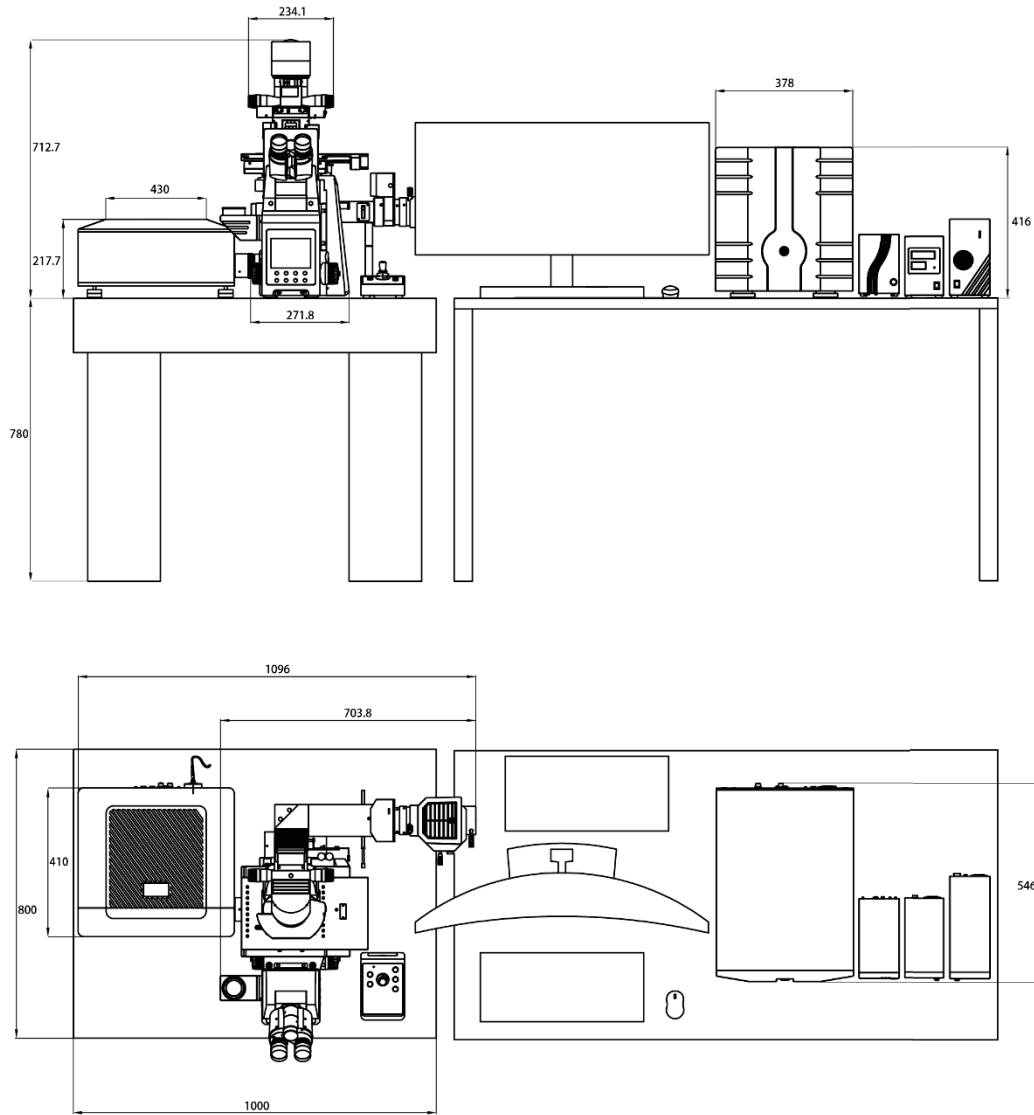
Note: ● Standard Outfit, ○ Optional

Sample Images





Dimension



Unit: mm