

## BCM Live Cell Microscope Imaging System



### Introduction

The BCM series is a fully automatic live cell imaging system, with phase contrast model BCM-1 and phase contrast & fluorescence model BCM-2. BCM is a revolutionary upgrade product for live cell imaging and analysis. It abandons the bulky housing and complicated operating steps of ordinary biological microscopes, allowing cell observation in one step. The built-in high-sensitivity camera has a time-lapse shooting function, which can fully record the cell culture process.

At the same time, the compact body of the BCM is convenient for cell observation anywhere, whether it is an experimental console, an ultra-clean workbench or a cell incubator.

### Features

1. Small size, can be placed in a cell incubator.

2. Z-axis auto focus, electric focus adjustment, easy operation.
3. A 10X infinite plan semi-apochromatic phase contrast objective lens has been adopted, which can achieve high signal-to-noise ratio, high-resolution and high-contrast imaging effects in a variety of illumination modes.
4. It uses a 5.0MP high-sensitivity camera with functions of photographing, video recording and time-lapse shooting to record cell growth status in real time.
5. The built-in phase contrast observation module is specially designed for live cell observation, with high contrast of cell imaging.
6. The transmitted light uses a 627nm red LED light source, which is friendly to cells and avoids long-term exposure to damage to cells; epi-fluorescence uses Blue and Green LED fluorescence light source to meet different needs of fluorescence imaging.
7. Compatible with various culture flasks and petri dishes.
8. High humidity resistance, chemical corrosion resistance, UV resistance, long service life and easy maintenance.
9. It has good airtightness and miniaturization design, can be placed in various incubators, and can work normally in an environment with 95% humidity, 37°C temperature, certain CO<sub>2</sub> concentration or H<sub>2</sub>O<sub>2</sub> gas.



## Application

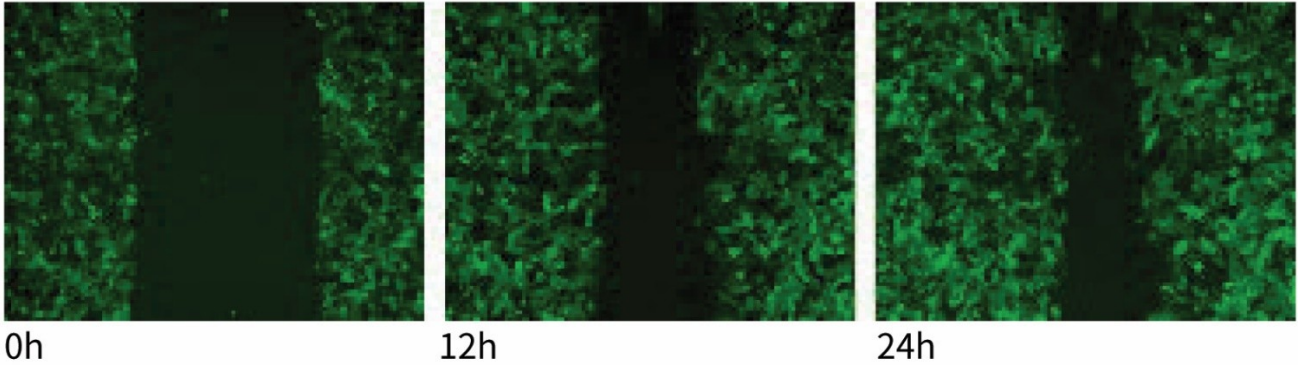
This live cell imaging system is mainly used in the fields of stem cell culture, biopharmaceuticals, scientific research and other life sciences applications, providing monitoring and data recording for stem cell growth, cell resistance, drug screening, cell proliferation and migration.

The main application areas are as follows:

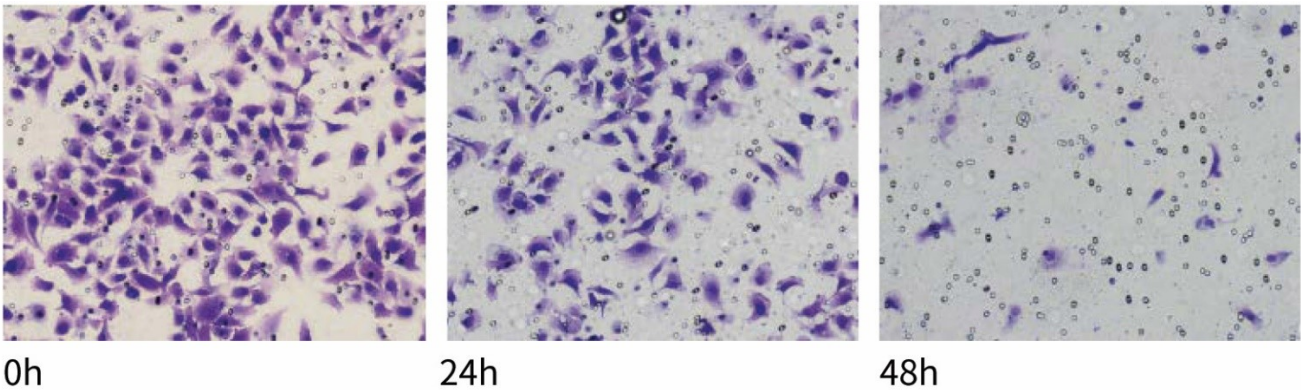
- \* Live cell imaging and cell growth monitoring;
- \* Optimization of cell analysis experiment conditions;
- \* Cell migration research;

- \* Cell quality control;
- \* Biopharmaceutical;
- \* Cell drug screening;
- \* Genetic analysis;
- \* Toxicological analysis.

Cell migration experiment:



Cell apoptosis test:



## Specification

Item	Specification	BCM-1	BCM-2
Transmitted Illumination	3W 627nm Red LED lamp	●	●
Reflected Illumination	3W 525nm Green LED lamp, 3W 485nm Blue LED lamp	○	●
Brightness Adjustment	Electric control brightness adjustment	●	
	Electric control transmitted and reflected illumination switching, electric fluorescence module switching, electric brightness adjustment		●
Stage	Fixed stage, compatible with various culture flasks and petri dishes	●	●
Objective	10X Infinite Plan Semi-apochromatic phase contrast objective (10X, NA=0.30, WD=7.4mm, cover slip thickness: 1.2mm )	●	●
Focusing	Electric focus, auto focus; focus stroke: up 7mm, down 1.5mm; manual 2mm/	●	●

	circle		
Built-in Camera	5.0MP high sensitive CMOS mono USB3.0 digital camera (CMOS sensor, 2/3", pixel size 3.45μm, resolution: 2448*2048, maximum frame rate: 35fps, interface: USB3.0)	●	●
Software	With basic functions such as photographing, video recording, and time-lapse photography	●	●
Size	220mmX264mmX240mm (WXDXH)	●	●
Tablet PC Rack	Tablet PC can be placed on top	●	●
Operation System	Windows: Win7, Win8, Win10, 64 bit	●	●
Software Language	Simplified Chinese, English	●	●

Note: ●Standard, ○ Optional

## Sample Images

