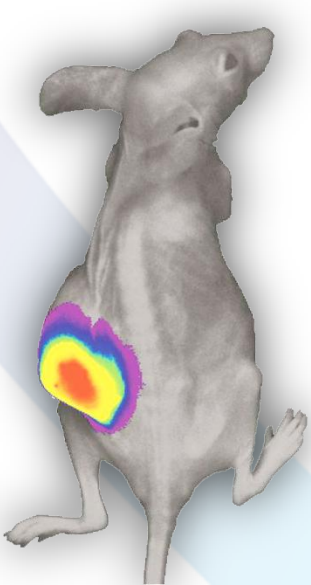
just as it is ...

BIOIMAGING SYSTEM



NEO Science

www.neosience.com

NeoScience Co., Ltd.

NeoScience has been established in 2011. Since its establishment, it has been conducting studies and inventing to manufacture the optimal Bioimaging instrument.

Brilliant ideas and simple design has been applied to create practical products.

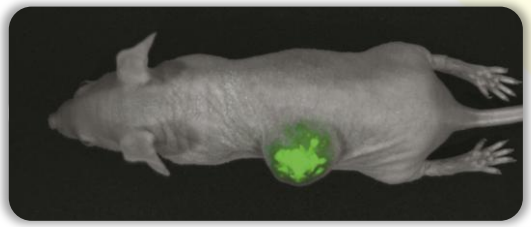
We will put a lot of efforts in our products to become a foundation of biological researches.

Thank you.

NeoScience Co., Ltd.

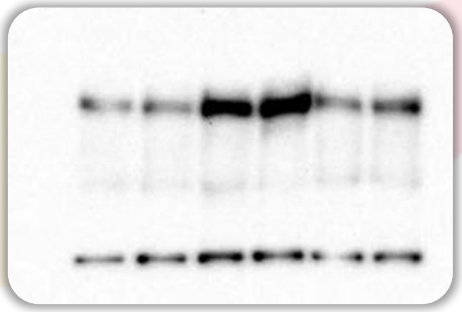
FOBI

Fluorescence Imaging



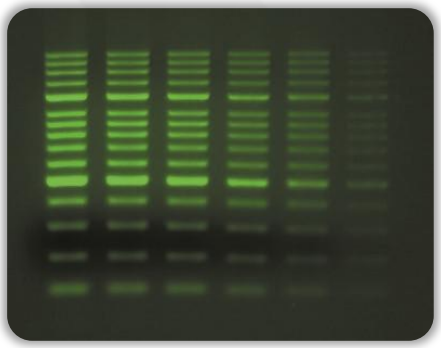
CheBI

Chemi-luminescence Imaging



FluoroBox

Nucleic acid Imaging



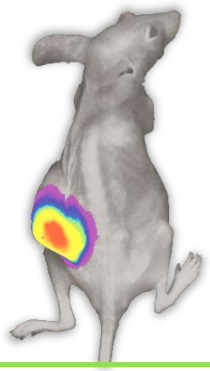
FOBI

Fluorescence Imaging System

In Vivo

Ex Vivo

In Vitro



FOBI is a bioimaging instrument which images and analyzes fluorescence signal from fluorescence labeled organism.

FOBI uses light source and filter that are optimized for In Vivo imaging to distinguish background and signal without preprocessing.

Diffused LED light makes the results more reliable as it reduces variations in position.

Not only highly sensitive images but also video files can be acquired by FOBI.

Its simple design and program allow ease of use and quick acquisition of data.

Real Color Data

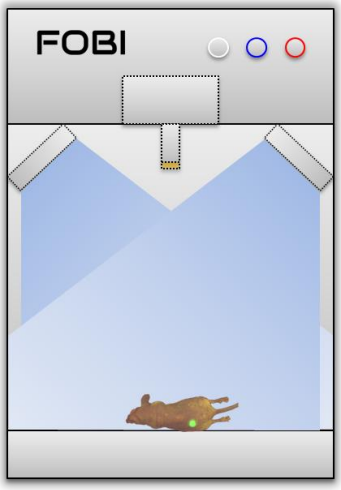
FOBI uses a color camera and optimized filter to imaging the fluorescence signal through the live window without preprocessing. You can intuitively identify the position and intensity of the fluorescence through these images.

Compact Size

FOBI has a compact size (26x26x40cm), making it easy to use and space efficient.

Fast Imaging

FOBI has fast response speed so you can get video data. The Live window allows you to observe the fluorescence signal in real time. These features provide instant observation and response.

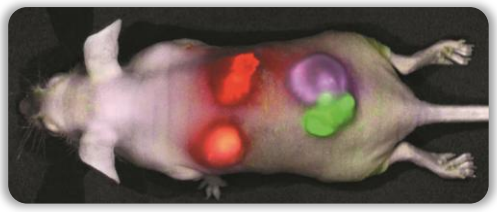


Easy to Use

FOBI's hardware and software are user-friendly and extremely easy to use. Images can be obtained through simple procedures, filter mounting, exposure adjustment and image capture.

Simple

FOBI has a simple structure, so installation is quick and easy. It is also convenient to move and maintain equipment.



Multi Function

FOBI can monitor various fluorescence signals from GFP to ICG in one sample using four channels. You can see the position of the fluorescent signal by merging with general picture. The position of the Tumor cell and the drug can be found in one animal.

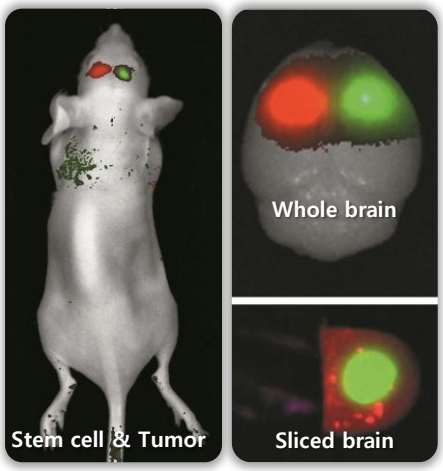
Applications

Tumor

It is possible to take an image of tumorization using GFP stable cell line.

FOBI can check the anti-tumor effect without sacrificing the animals by imaging and measuring the intensity of the signal. FOBI can confirm the location and extent of the cancer metastasis by tracking the fluorescence signal.

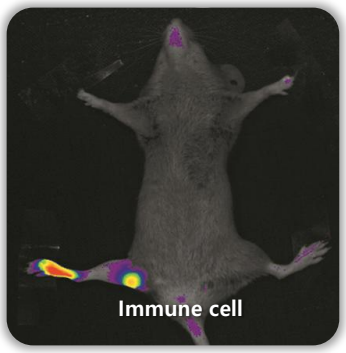
Stem Cell

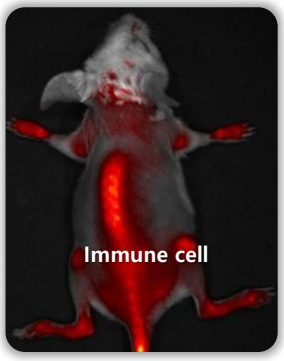


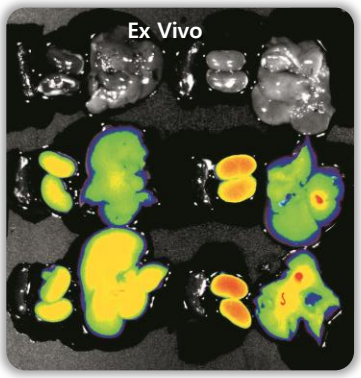
FOBI can check lifespan and location of the target cell that made for a variety of purposes.

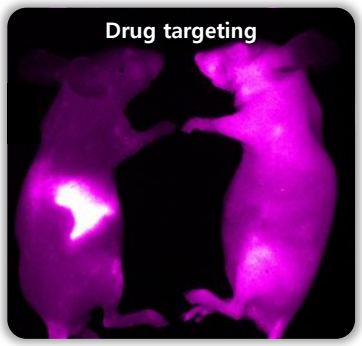
As there are several problems with the introduction of the fluorescence gene using a virus, fluorescence dye is used for staining of stem cells and immune cells.

Immune Cell









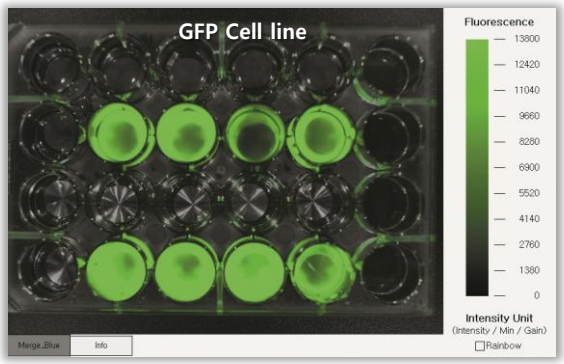
DDS (Drug Delivery System)

The new drug labeled with fluorescence reagent can be detected In Vivo. The results of In Vivo imaging data can be confirmed once again by Ex Vivo imaging.

Fluorescence signal can express continuously even after animal is sacrificed. It is possible imaging and quantification again after sacrifice.

Ex Vivo data can be a good evidence and increase the reliability of the test.

In Vitro



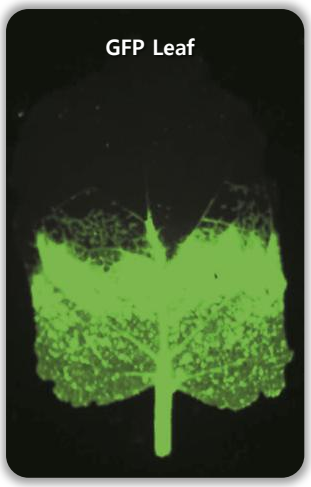
Chemical

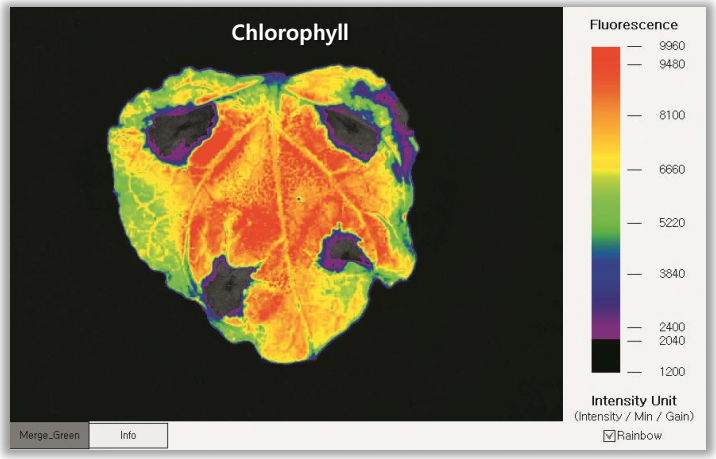
Fluorescence intensity of fluorescent reagents or cells can be checked In Vitro. This data can be an evidence whether the fluorescence is visible In Vivo or not in preliminary experimental steps. This result used as preliminary data for the experiment or can be a data itself.

Plant

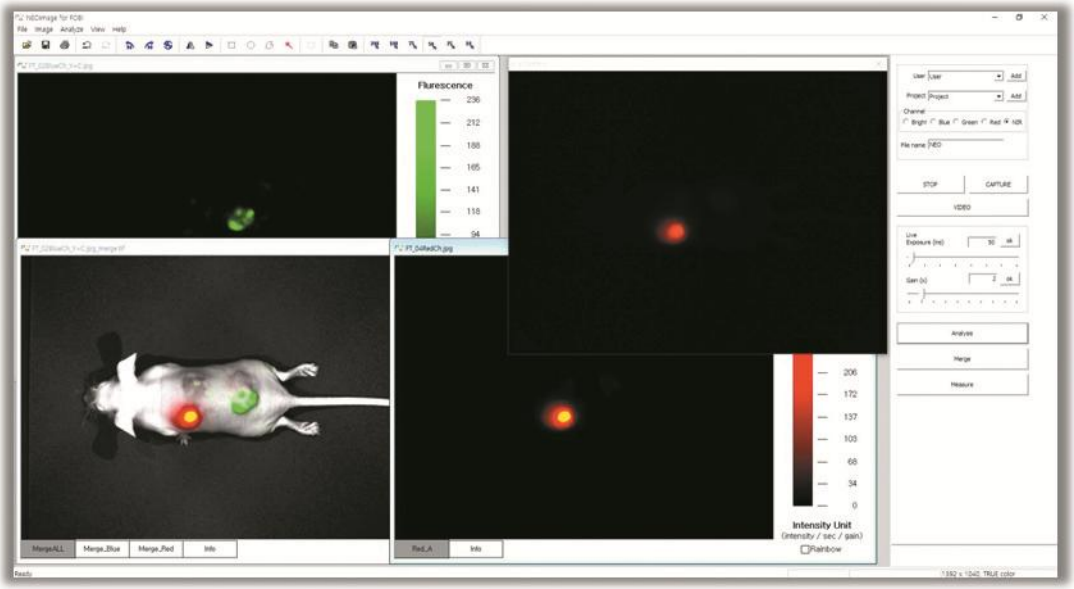
As plants have very strong auto fluorescent in Chlorophyll. So it is difficult to take fluorescence images of the plant leaf. However, FOBI can take images and analyze the quantity of fluorescence using the optimized filter and NEOimage software. Furthermore it is possible to take the images of the Chlorophyll's auto fluorescence as a data.

And FOBI can take images of seeds and callus. Plant's fluorescent whole period of growth can be checked by FOBI.



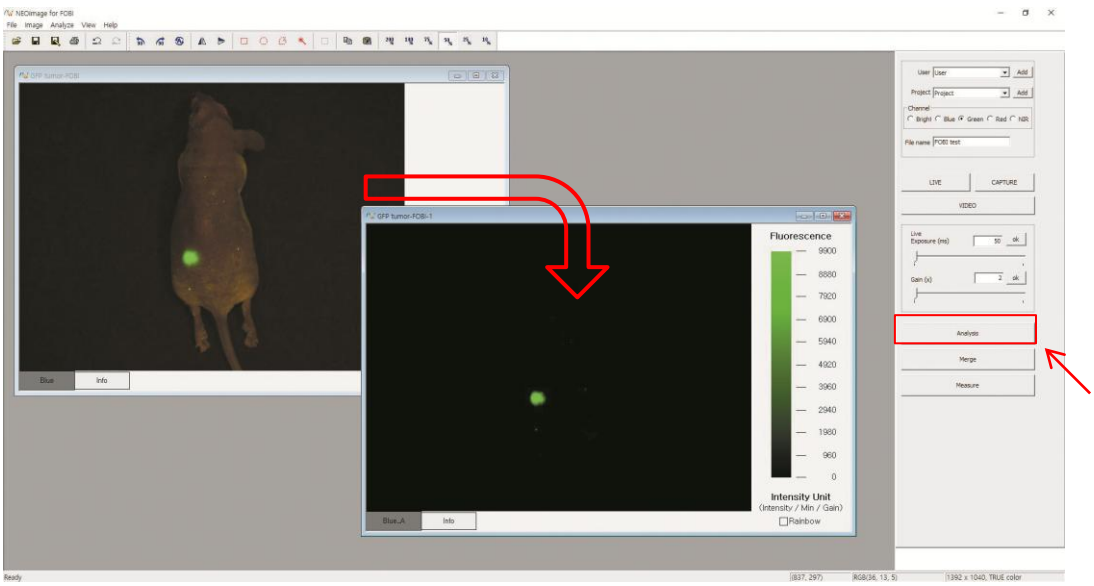


Software - NEOimage



NEOimage, which is a program includes image taking and analysis function, is very user-friendly and also it is very intuitively designed. Live window shows not only the bright image but also the fluorescent images at the real-time. It also helps users decide the exposure time. All the functions are available in the Dialog bar with icons, so anyone can use and analyze easily.

Background Subtraction

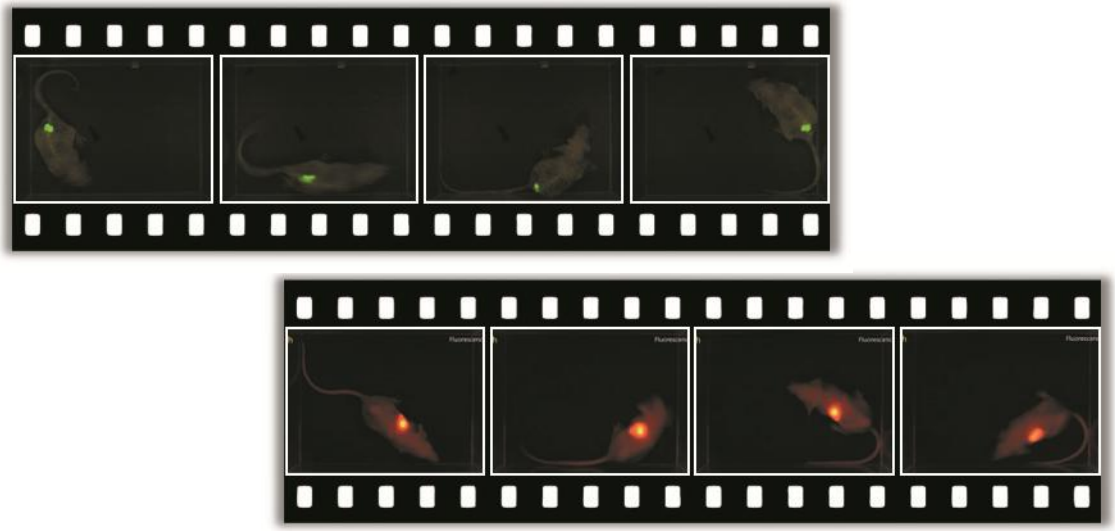


Auto-fluorescence and background that arisen from the sample can be simply subtracted. When the analysis is completed, a scale bar that can quantify the intensity of the fluorescence appears. The intensity can be indicated in one-color, two-color or rainbow-colored. As the maximum value of the scale bar can be modified, samples with different exposure time can be compared to each other.

Quantitative Data

When a sample is completed with the analysis, it can be merged with the bright image so that the location of the fluorescence can be confirmed. Region Of Interest (ROI) can be designated as a shape of rectangle, circle, polygon or automatically. Then the ROI can be quantified and the data will be shown in a table form. The data can be saved a csv file. And it can be open with Microsoft excel or other text programs.

Video Record

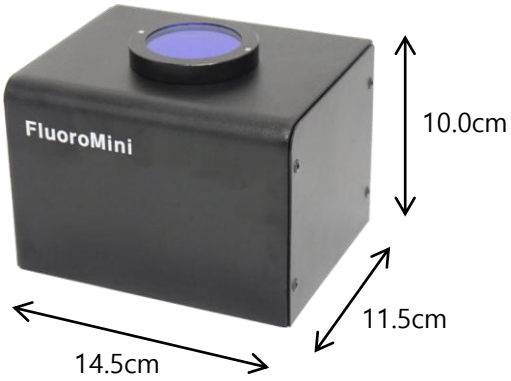


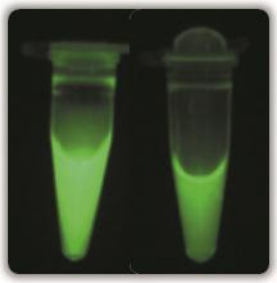
FOBI has fast speed enough to record videos. Fast speed enables immediate response. You can get videos when you are operating or injecting drugs. These video data can save a record of important fluorescent images that you may miss.

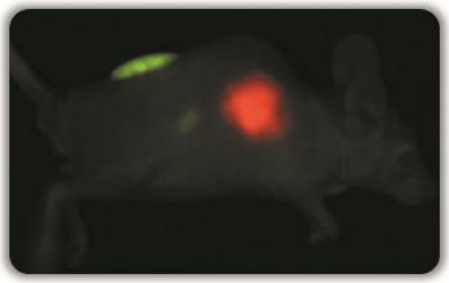
FluoroMini

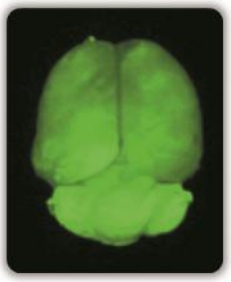
Mini In Vivo Imaging System

FluoroMini is available as a mini In Vivo Imaging system. Tumorization, Stem cell, Immune cell, DDS and Plant, Various applications can be applied. FluoroMini is a cameraless mini version of FOBI. But if you need an image, you can use normal camera to get the image and analyze.









FluoroMini

Stereo Microscope

Fluorescence Stereo Microscope

FluoroMini can be used as a fluorescence module for stereo microscope in conjunction with conventional stereo microscopes.

You can zoom in on the fluorescence-labeled experimental animal tissue, Zebra fish, and fruit flies.

It is an image device that enhances image data as an intermediate step between cell level image and organism level image.

FOBI

FOBI OP

FluoroMini

FOBI has four channels and is applicable to most fluorescent materials used in biological research. FOBI has three models. FOBI OP is an open type device that can be used when operating the animal labeled by fluorescent. FluoroMini is a cameraless mini version that can be used to simply check fluorescent or as a fluorescence module of a stereo microscope.

Specifications

Image Sensor	½" 1.4 megapixel color CCD sensor
Effective Pixels	1392x1040, 4.65μm square pixels
Frame Rate	15 fps at 1392 x 1040 pixels
Digital Output	24-bit
Interface Connector	Standard USB 2.0 high-speed interface
Channel	Blue (GFP, FITC...), Green (RFP, Cy3...), Red (Cy5.5, DiD...), NIR (Cy7, ICG...)
Weight	9 kg
Size (W x D x H)	260 x 260 x 400 mm
FluoroMini	Blue (GFP, FITC...), Green (RFP, Cy3...), Red (Cy5.5, DiD...), NIR (Cy7, ICG...)
	Size (W x D x H) : 145 x 115 x 100 mm

FluoroBox

Fluorescence (Nucleic Acid) Imaging System

Fluorescent detection

DNA gel

LED Light

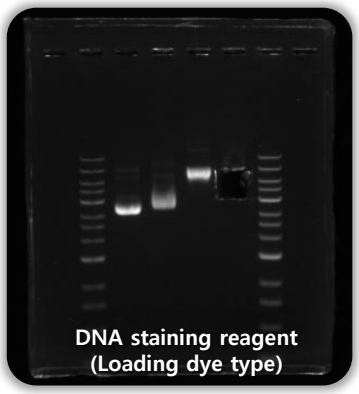
Cameraless

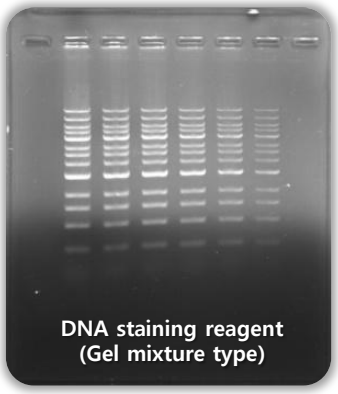
FluoroBox is a device that images DNA electrophoresis gel and analyzes. FluoroBox Blue is optimized for the reagents, wavelength of 450nm~490nm, that is invented alternative to EtBr. It consists of LED light and dark room chamber.

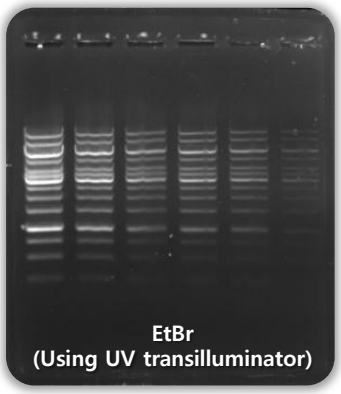
FluoroBox can also be used in conjunction with UV transilluminator.

Compact size and simple design has satisfied user's convenience. Gel can be observed through the window at the top and gel cutting can be done conveniently through the doors at each side. Our simple program enables users to obtain results easily and simply quantify the DNA band.

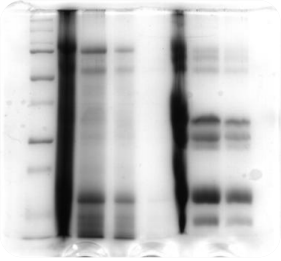
Applications



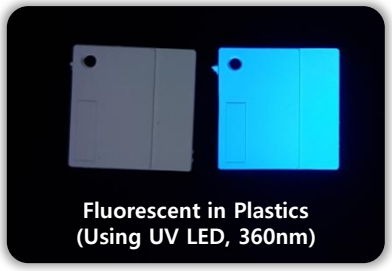




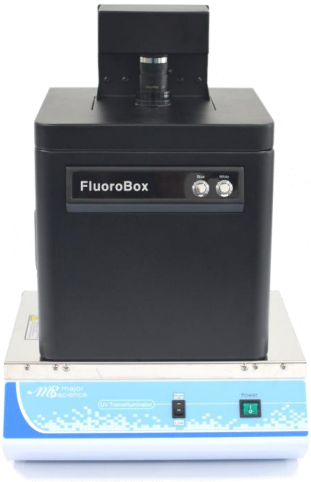
PAGE gel



Petri dish



Gel cutting



Use with UV illuminator

FluoroMini Light
(Mini Model)

Specifications

Camera	1/2" 1.3M 8bit CMOS, 1280 x 1024 pixels
Size (W x D x H)	260 x 260 x 400 mm
Interface connector	Standard USB 2.0
Field of View	138 x 110 mm
Light source	Blue, Green, Red or UV (360nm)
Software	Image capture, Set ROI: Manual or Automatic
Analysis	Subtract background, set ROI, measuring of intensity and integrated density
FluoroMini Light	Size (W x D x H) : 145 x 115 x 100 mm

CheBI

Chemi-luminescnece Imaging System

The Most Simple Chemi-Doc

Western Blot

Compact

High Sensitive

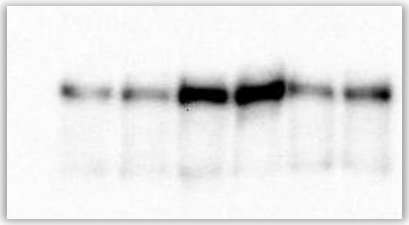
CheBI is optimized for Western blot experiment, using the highly efficient Cooling CCD Camera.

Its compact size (260 x 260 x 400mm) helps make better use of a space in the laboratory.

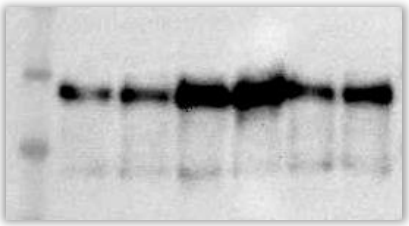
It's exposure time can be set by the users manually. And the images can be accumulated which enable users to choose the best image.

Users can select a certain Region Of Interest (ROI), measure the ROI and manage the data using Microsoft Excel.

Marker



Signal



Merge

High Sensitive Camera

CheBI uses high sensitive sensor with a quantum efficiency of up to 77%. Noise can be minimized by 40 ℃s cooling the sensor.

Easy to Use

NEOimage for CheBI has an intuitive interface so that first-time users can easily learn how to use it. You can take pictures in three ways. Capture, Accumulate and Auto-accumulate. The Accumulate method acquiring images of the set exposure time and sequentially accumulating the images. Auto-accumulate acquires image accumulated by the time determined by NEOimage according to the sample situation. This function is useful when the intensity of the signal is unknown.
CheBI's compact size and simple structure make it easy to use and manage.

Quantitation

You can quantify the signal based on area and intensity. Quantitative data can be shown in tables and can be expert to csv file.

Specifications

Resolution	6.1 Mega pixel
Camera cooling	Ambient - 40°C
Working temperature	0 ~ 60°C
Size (WxDxH)	260 x 260 x 400mm
Interface connector	Standard USB 2.0
Field of View	220 x 180mm
Exposure type	Manual or Accumulate
Maximum exposure time	30 min
Data backup	Save the backup data at the same time
Measurements	ROI area, intensity and integrated density
ROI setting	Manually or automatically

just as it is ...

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