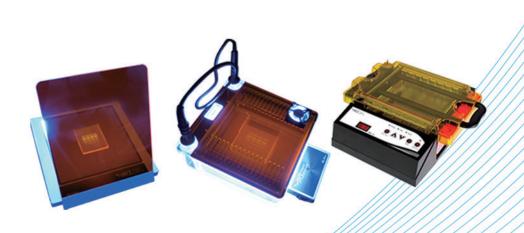


2023-2024 Catalogue

Blue light Technology









Innovative Life Sciences Tools



Life Sciences Research

Blue Light Technology

Blue light technology allows you to view your DNA/RNA bands without causing photo nicking damage to your samples. The SafeBlue series and BluView Series are designed for wide range of application.

The amazing SafeBlue product series makes use of the intensity of blue light from the side, while the BluView series radiates from below. Both SafeBlue and BlueView series allow you to run your standard electrophoresis experiment with immediate and outstanding results but without compromising your safety and protection.

SafeBlue system comprises the SafeBlue Illuminator, SafeBlue Electrophoresis System and SafeBlue Imager Systems. All three products are completely compatible with each other. Different accessories are also available in case of necessary extensions or replacements. For the BluView system, packages of BluView Transilluminator, Mini Horizontal Gel Electrophoresis System, and power supply are available.

□ SafeBlue System 55-57

SafeBlue Illuminator Electrophoresis System

■ Blue Light Illuminator 58-59

BluView Transilluminator



^{*}Please visit our website at www.majorsci.com for more product selection and detailed information.

 $^{^{\}star}$ All images are for reference only, actual products might differ from the pictures above.

^{*} Technical specifications subject to change without notice.

SafeBlue Illuminator Electrophoresis System

MBE-150 MBE-150-PLUS

For MBE-150

The innovative SafeBlue Illuminator is a unit a which combines of a small power supply with a blue light illuminator. The system emits blue LED light which allows you to view your DNA/RNA bands without worrying about harmful UV damage samples. SafeBlue Illuminator could also be used as a simple blue light illuminator to cut your samples from gels.

For MBE-150-PLUS

The SafeBlue Electrophoresis System also uses blue LED light to allow for immediate visualization of DNA/RNA bands while running agarose electrophoresis gel. The complete system comes with three different sizes of gel trays for your convenience of use, 150x70mm, 150x100mm and 150x150mm. The system is RoHS and CE compliant for environmental and safety concerns. Different accessories are also available for user to select.



4 in 1 feature allows you to run as you see in real-time motion



MBE-150 includes:

- 1 x SafeBlue Illuminator
- · 1 x Power adaptor
- 1 x Power cord



- 1 x SafeBlue Illuminator
- 1 x SafeBlue Electrophoresis Tank
- 1 x Filter lid
- 1 x Threaded Black and Red Electrophoresis Cable
- 1 x 150x70mm UV tray
- 1 x 150x100mm UV tray
- 1 x 150x150mm UV tray
- 2 x 20 sample combs (1mm thick)
- 2 x UV tray casting dams
- 1 x SafeBlue electrophoresis gel tank image enhancer film

F© C E

Features

- Innovative a complete 4-in-1 system (run, view, capture and cut gel) with simple and easy set up on the image capture/analysis software.
- Convenient run as you see, real time visualization on your DNA/RNA band migration
- Compact footprint smaller than most UV transilluminator, easy to move and ideal for limited bench top space
- Economical an inexpensive imager system with digital camera. Multiple accessories are also available to increase experimental efficiency
- Safe 470nm blue light less invasive than UV light
- Flexible UV tray adaptors available, compatible with MJ-105A.
- Versatile support gel trays 150x150mm or smaller
- Optimized performance SYBR series DNA/RNA stains, Novel Juice and Midori Green series
- · Simple DNA/RNA recovery method

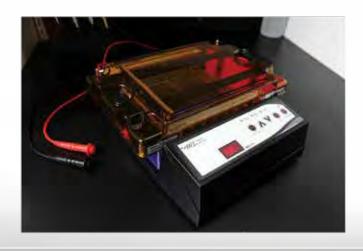


Specification

•			
Cat. No.	MBE-150		
Output Voltage / Inc.	10-150V / 1V		
Output Current / Inc.	10-300mA / 1mA		
Max. Power	30W		
Operating Mode	Constant Voltage or Current		
Timer	999 (min) with alarm / Continuous		
Safety Device	No load detection		
Crossover	Yes		
Blue Light Wavelength	470nm		
Operating Temperature	Ambient to 40°C		
Dimension (WxLxH)	Approx. 11.5"x7.9"x3.2" (293x200x80mm)		
Weight	Approx. 2.4lb (1.1kg)		
Material	Polycarbonate housing and aluminum base plate		
Power Adaptor	Input: 100-240VAC, 50/60Hz, 1.4A		
'	Output: 15VDC, 4.0A, 60W max.		
Cat. No.	MBE-TANK		
Dimension (WxLxH)	Approx. 10.4"x6.9"x3.5" (265x175x90mm)		
Gel Dimension (WxL)	Approx. 5.9"x2.8" (150x70mm), 5.9"x3.9" (150x100mm), 5.9"x5.9" (150x150mm)		
	70 for 5.9"x2.8" (150x70mm) Tray (2x35 sample combs)		
Maximum Sample	140 for 5.9"x3.9" (150x100mm) Tray (4x35 sample combs)		
	210 for 5.9"x5.9" (150x150mm) Tray (6x35 sample combs)		
Buffer Volume	500ml		
Construction	Acrylic (Injection molded construction)		
Construction	Durable, leak proof environment for complete safety and long life		
Cassette Type Electrode	Inexpensive, easy to replace		
Floatrical Cafety	Lid can only be fastened in one way		
Electrical Safety	Upon lid removal, power is disconnected from buffer chamber		
Rapid Casting Gel	Use casting dams		
Cat. No.	MBE-LID-Y1		
Dimension (WxLxH)	Approx. 6.9"x10.6"x1.4" (176x268x35mm)		
Filter Type	Amber filter (for dyes selection please refer to comparison table for various nucleic acid stain performance(Page 57)		
Lid Filter Wiper	Used to remove condensation		
Material	Polycarbonate		

Ordering Information

Cat. No.	Product Description
MBE-150	SafeBlue Illuminator
MBE-150-PLUS	SafeBlue Electrophoresis System, including SafeBlue Illuminator, electrophoresis gel tank, amber filter lid, image enhancer film and red/black cable
MBE-TLC	Package of MBE-TANK, MBE-LID-Y1, MBE-150-CABLE



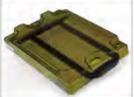
^{*} All images are for reference only, actual products might differ from the pictures above. * Technical specifications subject to change without notice.

Accessories

Cat. No.	Product Description
MBE-TANK	ME15 Tank for SafeBlue without Lid and Red/Black Cable
MBE-LID-Y1	MBE-150 Lid, yellow
MBE-150-CABLE	Threaded Black and Red Electrophoresis Cable
MBE-TANK-01	120x155mm, shiny black protective film
MBE-150-02	165x140x19mm, Acrylics, cutting platform
MBE-150-3	Base unit platform protective film
ME15-UV15-TH01	ME15-UV15 Tray Holder, 2 cuts, cut size 109.5x60.5mm(For MJ-105 Trays)
ME15-UV15-TH02	ME15-UV15 Tray Holder, 1 cuts, cut size 130.5x122.5mm
MBE-G-Y1	Amber filter viewing glasses, 560nm

^{*} For more information of MBE-IMG-CA, please refer to SafeBlue Imager System.





MBE-LID-Y1



MBE-150-CABLE



MBE-TLC



MBE-TANK









MBE-TANK-01

MBE-150-02

MBE-150-3

ME15-UV15-TH01

ME15-UV15-TH02 MBE-G-Y1

Comparison table for various nucleic acid stain performance

Nuclaia Acid Stain	Performance	Experimental Protocol		
Nucleic Acid Stain		Pre-staining	Post Staining	Sample Staining
SYBR® Green I (DNA)	Excellent	$\sqrt{}$	V	$\sqrt{}$
SYBR® Green II (RNA)	Excellent		V	$\sqrt{}$
SYBR® Gold	Excellent	√	V	
Midori Green Driect	Excellent			V
Hydra Green™ Safe DNA Dye	Excellent	√	V	
HD Green™ DNA Stain	Excellent	$\sqrt{}$	V	
SafeView DNA Stain	Good	$\sqrt{}$		
SYBR® Safe	Good	$\sqrt{}$	V	
Midori Green	Good	$\sqrt{}$	$\sqrt{}$	
Midori Green Advanced	Good	$\sqrt{}$	V	
Serva DNA Stain Clear G	Good	$\sqrt{}$	V	
GelGreen ™	Good	$\sqrt{}$	$\sqrt{}$	
GelRed ™	NR		V	
Ethidium Bromide	NR	√	V	
HealthView ™	NR	√		

^{*}NR= Not recommended*

MBE-150-PLUS Innovative Electrophoresis System

- 1. Early detection of running error (run as you see)
- 2. Prevention for breaking gel- no more gel transferring (no more gloves!!)
- 3. Time saving gel staining & de-staining
- 4. Compact in size (no large lab area required)

SafeBlue System

SafeBlue Electrophoresis System

Electrophoresis Running

Sample Observation Image Capture

SafeBlue Imager System

5 for all

Method

Traditional Gel Electrophoresis System +

Gel and Sample

Preparation

Power Supply

+ UV Transilluminator + Gel Documentation System

^{*} All images are for reference only, actual products might differ from the pictures above. * Technical specifications subject to change without notice.

BluView Transilluminator

MBE-200A

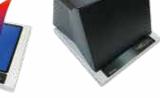
The advanced BluView Transilluminator separates its 580nm amber lid from the body, and makes the illuminator thinner and more lightweight. Like the last generation of BluView Transilluminator, it is packed with safe 470nm blue LED light. With imaging size of 153x153mm, you could fit any small midi size gel on top of the transilluminator. The BluView Transilluminator is also compatible with our imaging system such as Digimage System and Smartview Simple System.

Features

- · Thinner and more lightweight body
- Easy to carry in between labs
- Aluminum alloy casing design
- Low heat dispersion
- Energy saving product
- · 470nm harmless blue light for direct human contact









BluView Transilluminator

MBE-300

Major Science BluView Transilluminator uses the harmless blue LED instead of aggressive UV lights, and allows you to directly view the experiment result without wearing any UV protection equipment. With its compact size and light weight, the transilluminator occupies little of your lab bench and is easy to be moved from lab to lab.

Package with our Mini Horizontal Gel Electrophoresis System is available to perform real time observation and early mistake detection.







((

 $^{^{\}star}\,\mathrm{All}$ images are for reference only, actual products might differ from the pictures above.

^{*} Technical specifications subject to change without notice.

Specification

Cat. No.	MBE-200A	MBE-300	
Dimension (WxLxH)	Approx. 7.9"x7.9"x0.6" (200x200x13.9mm) Approx. 3.4"x6.7"x1" (86x170x25mm)		
Viewing Area (WxL)	6"x6" (153x153mm)	Approx. 4.4"x2.9" (112x74.6mm)	
Blue Light Source	15W 20W		
Illuminator Base Design	Flat Bed		
Blue Light Wavelength	470nm		
Automatic Shutdown	Approx. 6 min		
Material	Aluminum Alloy		
Power	DC 12V, 2A		
Weight	Approx. 1.68lb (760g) Approx. 0.75lb (338g)		

Ordering Information

Cat. No.	Product Description
MBE-200A	Advanced BluView Transilluminator, 470nm, viewing area 153x153 mm, amber filter(MBE-LID-AM580),
	synthetic paper hood are included
MBE-300	BluView Transilluminator, 470nm, viewing area 112x74.6 mm, amber filter(MBE-LID-AM580) is included







MBA-300 + MJ-105A + MP-100

MBA-300 + MJ-105A + MINI-300

MBA-300 + MJ-105A

Accessories

Cat. No.	Product Description
MJ-105A	Transparent Mini Horizontal Electrophoresis System
MBE-102	Lid with 580nm amber filter and evaporation fan for ME10-7-10
MBE-103	Lid with 580nm amber filter and evaporation fan for ME7-7-10
MBE7-TANK	ME7-7-10 Electrophoresis tank only, without Lid and Red / Black Cable
MBE10-TANK	ME10-7-10 Electrophoresis tank only, without Lid and Red / Black Cable
MBE-150-CABLE	Threaded Black and Red Electrophoresis Cable
MJ-LID-AM580	580nm amber filter lid with fan, suitable for MJ-105A
MBE-LID-AM580	An inclined 580nm amber filter, suitable for MBE-200A and MBE-300
MBE-HOOD	Synthetic paper hood













MJ-105A

MJ-LID-AM580

MBE-103

MBE7-TANK







MBE-LID-AM580

MBE-HOOD

MBE-150-CABLE

^{*} All images are for reference only, actual products might differ from the pictures above. * Technical specifications subject to change without notice.



Taiwan Headquarters

Headquarters:

No. 156, Sec. 1, Guoji Rd., Taoyuan Dist., Taoyuan City 33061, Taiwan T/+886-3-3762878 F/+886-3-3761310

Factory: No.19, Ln. 207, Huakang St. Bade Dist., Taoyuan City 33464 Taiwan T/ +886-3-3623319 F/ +886-3-3623133 Email: info@majorsci.com

Shanghai Office

Room 612, International business exhibition center, 9300 Hunan Road, Pudong, Shanghai, China National toll-free No.:400-823-9177 T/ +86-21-50795277 F/ +86-21-50795277

US Office

19959 Sea Gull Way Saratoga, CA 95070 U.S.A. T/ +1-408-366-9866 F/ +1-408-446-1107

India Office

D. No. 12-13-99, Satguru Apts. Extn. Street. No. 3, Lane No.1, Tarnaka Secunderabad – 500 017. India T/ +91-40-27001515 T/ +91-40-27001586



www.majorsci.com info@majorsci.com



