



Cat. No.	FG-05	FG-06	FG-300
<i>Fluorescent lightning</i>	Blue LED (470 nm)	Blue LED (470 nm)	UV-light (302 nm)
<i>DNA Dyes</i>	Green dyes	Green dyes	Red and green dyes
<i>View area</i>	12 cm x 7 cm	20 x 16 cm	26 cm x 21 cm
<i>Filter</i>	Amber filter (~520 nm)	Amber filter (~520 nm)	UV-blocking shield
<i>Power</i>	AC adapter 24 V, 1 A	24 V, 1.67 A	48 W
<i>Dimension</i>	21 x 21 x 3 cm	38 x 40 x 8 cm	28 x 34 x 8 cm
<i>Weight</i>	2.1 kg	3 kg	4.3 kg

FastGene® Blue LED (Trans-)Illuminators



Fig. 1: The FastGene® LED Illuminator (Cat. No. FG-05)



Fig. 2: The FastGene® Blue LED Transilluminator (Cat. No. FG-06)

The FastGene® LED Illuminator and the FastGene® LED Transilluminators are using LED's. Light from the **blue LED** source inside the instrument produces light with a narrow emission peak centered at approximately 470 nm, effective for the visualization of nucleic acid stains such as Midori Green and SYBR® dyes. Whereas UV light shows the highest sensitivity with dyes like Ethidium Bromide, the longer wavelength lead to perfect results with the new dyes mentioned above.

The biggest advantage for the usage of these LED instruments is the fact that the light does not affect skin and eyes and most important the DNA won't be damaged at all. This is especially important if the excised DNA fragment should be used for cloning experiments. All instruments exhibit an orange coloured filter which allows the examination of the separated DNA without any goggles.

FastGene® UV Transilluminator



Fig. 3: The FastGene® UV Transilluminator (Cat. No. FG-300)

The achievable sensitivity of the detection of DNA, stained with Ethidium Bromide, is strongly dependent on the quality of the UV lamps and of the filter material. High quality UV tables show almost no visible light. The quality of the UV light source and of the filter can easily be tested: UV light is invisible to the human eye. If the position of the UV lamps are easily detectable, then the quality of light bulbs and the filter are inferior. The FastGene® UV Transilluminator passes this test without a problem. Furthermore, the FastGene® UV Transilluminator includes a specifically manufactured filter system and shows a very effective protection against harmful UV radiation.

The combination of high-quality UV lamps and optimized filter material allow the best detection of nucleic acids.

Specification

Product	Blue LED Illuminator (FG-05)	Blue LED Transilluminator (FG-06)	UV Transilluminator (FG-300)
Size	210 x 210 x 30 mm	280 x 340 x 80 mm	280 x 340 x 80 mm
Working area	120 x 70 mm	200 x 160 mm	260 x 210 mm
Weight	2,3 kg	3 kg	4,3 kg
Wave length	470 nm	470 nm	302 nm (6 x 8 Watt)
Filter	orange	orange	0.01 % UV tansmissibility
LED/Bulb position	aside, above working area	aside, below working area	below working area

FastGene® Blue/Green LED Flashlight

Blue/Green light wherever you need it

Visualize your gel with the new Blue/Green LED flashlight. It is equipped with the same Blue/Green LED technology used in the Blue/Green transilluminator.

The FastGene® Blue/Green flashlight has all the benefits from the LED light, such as harmless to your skin and to your DNA sample, as well as the signal intensity previously only seen on UV-light transilluminators.

Perfect for Transfection and Transformation Control

Additionally it is possible to detect GFP expression without the use of the harmful UV-light. The light of the LEDs is able to surpass tissues enabling the detection of internally expressed GFP (see Fig. 2).

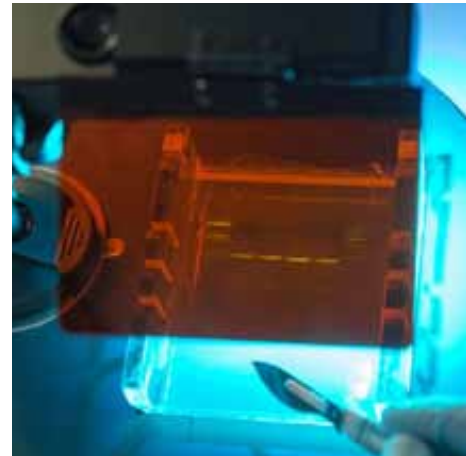


Fig. 1: The FastGene® Blue/Green LED Flashlight is very handy. The Blue/Green LEDs can be used to excite gels stained with red or green dyes, such as Midori Green Advance shown here.

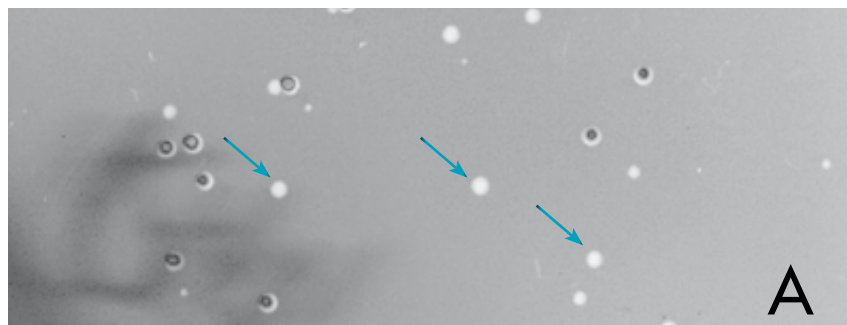


Fig. 2: Detection of fluorescent proteins (A) In bacteria: The blue/green LED technology is able to excite the red fluorescent proteins (RFP or mCherry). This was used to select the positively expressing colonies. (B) In mice: The expression of GFP transgenic mice can be verified using the FastGene® Blue/Green LED Flashlight. The top mouse is expressing GFP in its neural tissue, the lower mouse is the negative control and does not show any fluorescence.

Ordering Information

Cat. No.	Product
FG-05	FastGene® Blue LED Illuminator
FG-06	FastGene® Blue LED Transilluminator
FG-300	FastGene® UV Transilluminator
FG-11	FastGene® Blue/Green LED Flashlight
FAS-GPST	FastGene® Cutting board and stand

