BLooK LED transilluminator

Catalog number: BK001
Serial number: BK27888001

Description
BLooK is a remarkable blue light LED transilluminator for the detection of nucleic acids or protein under non-UV conditions. The wavelength of the special blue LED lights is 470 nm (fig 1), hence no damage to your nucleic acids or protein. Also, since UV is not used, there is no need for any special personal eye or skin protection. The blue LED lights are arranged under the viewing area (200 × 120 mm). An amber filter, on hinges, is lowered into position once your gel is mounted. The stained gel is now ready for viewing. This instrument has a specially designed ergonomic 4° angle, so users can easily sit on a chair to see the experiment results. BLooK is designed to view the gel after running electrophoresis on the gel stained with the Novel Juice, Novel Green, Novel Green Plus, Nimble Juice or Nimble Juice RTYPE. Further, it is perfectly designed for OnePCR™, OnePCR™ HiFi, OnePCR™ HotStar, OnePCR™ Plus, OneMARK B, and OneMARK 100, which contains the fluorescent stain compatible with the blue light wavelength. However, BLooK is not suitable for ethidium bromide.

Features
- Ergonomic fusion-Patented 4° ergonomic viewing angle ( “Golden Angle” )
- Optimized for use with the nucleic acid and protein fluorescent dyes.
- Blue light source good for 30,000 hours.
- No risk of UV damage for high quality work experience.
- Smart power-saving function - Automatic power shut-off option at 5 minutes.
- Gel-cutting knife - Cut out the target from the gel for further experiment.

Fig.1. Emission spectrum for the BLooK LED transilluminator
Specifications

<table>
<thead>
<tr>
<th>Specification</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unit dimensions (W × L × H)</td>
<td>295 × 215 × 42 mm (11.6 × 8.4 × 1.6 in)</td>
</tr>
<tr>
<td>Gel viewing dimensions (W × L × H)</td>
<td>200 × 120 mm (7.8 × 4.7 in)</td>
</tr>
<tr>
<td>Weight (g)</td>
<td>1280</td>
</tr>
<tr>
<td>Input voltage</td>
<td>100-240Vac, 50 / 60 Hz</td>
</tr>
<tr>
<td>Input current</td>
<td>1.4A</td>
</tr>
<tr>
<td>LED source</td>
<td>Built-in blue light LED module</td>
</tr>
<tr>
<td>LED life (hours)</td>
<td>&gt;30,000</td>
</tr>
<tr>
<td>Emission maxima (nm)</td>
<td>470</td>
</tr>
<tr>
<td>Store temperature</td>
<td>25°C</td>
</tr>
<tr>
<td>Operating temperature</td>
<td>Ambient to 40°C</td>
</tr>
<tr>
<td>Auto shut-off (min)</td>
<td>5</td>
</tr>
<tr>
<td>Filter type:</td>
<td>Amber filter (ideal for Novel Juice, Novel Green, Novel Green Plus, OnePCR™, OnePCR™ HiFi, OnePCR™ HotStar, OnePCR™ Plus, OneMark B, OneMARK 100, Nimble Juice, Nimble Juice RTYPE)</td>
</tr>
</tbody>
</table>

Contents:

(A) Power Cord: Used to connect the BLooK port with the power socket.
(B) BLooK LED transilluminator
(C) Gel-Cutting Knife: Cut out the target from the gel for further experiment.
(D) Replacement Blade: Used as the new blade.
BLooK LED transilluminator

Amber filter
The upper panel is the amber filter used to observe the gel upon being lowered in position.

Light source
The light source is located below and projects upward from the bottom. Please first lower the amber filter in position when in use for preventing the strong light from harming the eyes.

Power inlet
is used for connecting the power cord.

Ventilation holes
are located on the same side and enable the heat, which is generated when power is on, to be displaced.

ON/OFF button
is used for switching on and off the power.

Dented holder
A long, dented holder, which is located close to the operator, is used to store the gel-cutting knife.

Operating
1. Place the BLooK LED transilluminator on a level bench, with enough space around the unit for allowing air circulation and preventing overheating.
2. Connect the power cord and the socket.

3. Place the gel on the transparent glass support area.
   **Note:** The automatic power shut-off option at 5 minutes. Once the LED lights are off, wait for 3 minutes, then press the power button again to re-turn on the light.

4. Close the amber lid above the gel.

5. Press the ON / OFF to ON mode.

6. Now the fluorescent samples can be viewed or cut.

   **Note:** For cutting fluorescent samples out of the gel, please lift the lid to access the gel.

7. When finished turn the transilluminator off.

8. Clean the transilluminator filter and surface by wiping with a wet, not scratching cloth.
Troubleshooting
Refer to the table below to troubleshoot problems that you may encounter when viewing with the BLooK LED transilluminator

<table>
<thead>
<tr>
<th>Problem</th>
<th>Cause</th>
<th>Solution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low sensitivity</td>
<td>Wavelength may not be right</td>
<td>Check the excitation and emission wavelengths of the fluorescence dye</td>
</tr>
<tr>
<td>Automatic shut- off</td>
<td>Automatic power-off system</td>
<td>Please wait for 3 minutes, then press the power button again to re-turn on the light</td>
</tr>
<tr>
<td>High background, suboptimal, or no image</td>
<td>Low sample concentration</td>
<td>Check the concentration of sample</td>
</tr>
</tbody>
</table>

Related Ordering Information

<table>
<thead>
<tr>
<th>Cat. No.</th>
<th>Description</th>
<th>Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>LD001-1000</td>
<td>Novel Juice</td>
<td>1 ml</td>
</tr>
<tr>
<td>LD002-0500</td>
<td>Novel Green</td>
<td>500 μl</td>
</tr>
<tr>
<td>LD003-0500</td>
<td>Novel Green Plus</td>
<td>500 μl</td>
</tr>
<tr>
<td>MB203-0100</td>
<td>OnePCR™</td>
<td>100 Reactions</td>
</tr>
<tr>
<td>MB205-0100</td>
<td>OnePCR™ HiFi</td>
<td>100 Reactions</td>
</tr>
<tr>
<td>MB206-0100</td>
<td>OnePCR™ HotStar</td>
<td>100 Reactions</td>
</tr>
<tr>
<td>MB207-0100</td>
<td>OnePCR™ Plus</td>
<td>100 Reactions</td>
</tr>
<tr>
<td>DM101-0100</td>
<td>OneMARK 100</td>
<td>600 μl</td>
</tr>
<tr>
<td>DM110-0100</td>
<td>OneMARK B</td>
<td>600 μl</td>
</tr>
<tr>
<td>NJ001-0010</td>
<td>Nimble Juice</td>
<td>10 ml (100x)</td>
</tr>
<tr>
<td>NJ002-0500</td>
<td>Nimble Juice R TYPE</td>
<td>500 mL</td>
</tr>
</tbody>
</table>

Note: Please, read the installation instruction carefully before installing the BLooK LED transilluminator. This instrument is intended for clinical and research laboratory use and it must be operated only by specialized personnel aware of the potential risks associated with the chemical and biological agents normally used with this unit. This instrument is meant for use only by specialized personnel that know the health risks associated with blue light radiation and with reagents that are normally used with this instrument. It is designed to shield only the person working in front of the system and to observe the gel fluorescence emission clearly.
Maintenance and Repair

Cleaning and Maintenance
The transilluminator should be damply wiped off with a soft cotton cloth. The cloth should not be too wet. Do not use aggressive cleaning detergents or solvents. After use of the transilluminator, we recommend to wipe off the frame and the filter glass with a damp cloth. Take care that the cloth is not soaked with scrubbing or corrosive detergents as this could damage the filter glass. We suggest using alcohol, glass cleaners or similar mild detergents. Pay attention to wearing appropriate gloves when cleaning areas (as the filter plate of the transilluminator, switches, protection shield) which may have been in contact with carcinogenic or toxic reagents. The protection shield is made of tempered glass and must only be cleaned with a damp cloth.

Method of Replacing with the New Blade
When replacing with the new blade, unscrew the black handling part of the knife counterclockwise from the blue part. Push out the blue part's blade-holding section. Remove the old blade, and open the “SPARE BLADE” for taking out the new replacement blade. Insert it into the X-shaped blade insertion hole. Restore the blue connector back into the original position, and then screw tight the blue part with the black handling part clockwise.
Caution: The blade is quite sharp. Please act with caution to avoid cuts.

Replacement of Spare Parts
Only original spare parts are allowed.

Servicing
Please contact your local dealer.
The BLooK LED transilluminator is warranted against defects in materials and workmanship for 1 year. If any defects occur in the instrument or accessories during this warrant period, GeneDireX will repair or replace the defective parts at its discretion without charge. The following defects, however, are specifically excluded:
1. Defects caused by improper operation.
2. Repair or modification done by anyone other than GeneDireX or an authorized agent.
3. Damage caused by substituting alternative parts.
4. Use of fittings or spare parts supplied by anyone other than GeneDireX.
5. Damage caused by accident or misuse.
6. Damage caused by disaster.
7. Corrosion caused by improper solvent or sample.
For any inquiry or request for repair service, contact your local GeneDireX office. Inform the model and serial number of your instrument.
REGULATORY NOTICE
IMPORTANT: This GeneDireX instrument is designed and certified to meet safety standards. Certified products are safe to use when operated in accordance with the instruction manual. This instrument should not be modified or altered in any way. Alteration of this instrument will:
1. Void the manufacturer’s warranty
2. Void the safety and EMC certification
3. Create a potential safety hazard
GeneDireX is not responsible for any injury or damage caused by the use of this instrument for purposes other than those for which it is intended, or by modifications of the instrument not performed by GeneDireX or an authorized agent.

Appendix
Explanation of Symbols and Warnings

BLooK LED transilluminator complies with the European Community Safety requirements.
A CE Marking is a European marking of conformity that indicates a product complies with the essential requirements of the applicable European laws or directives with respect to safety, health, and environment and consumer protection. Generally, this conformity to the applicable directives is done through self-declaration. The CE Marking is required on products in the countries of the European Economic Area (EEA) to facilitate trade among the member countries. The manufacturer or their authorized representative established in the EEA is responsible for affixing the CE Marking to their product. The CE Marking provides a means for a manufacturer to demonstrate that a product complies with a common set of laws required by all of the countries in the EEA to allow free movement of trade within the EEA countries.

Caution
Caution risk of danger.
Consult the User Guide for further safety information.
Do not dispose of this product in unsorted municipal waste.

Caution
To minimize negative environmental impact from disposal of electronic waste, do not dispose of electronic waste in unsorted municipal waste. Follow local municipal waste ordinances for proper disposal provision and contact customer service for information about responsible disposal options.
Safety Information

The BLooK LED transilluminator is an electrical device. Never touch the power cord or outlet with wet hands. Do not use this device in damp areas or while standing on damp floors. Do not attempt to open the BLooK LED transilluminator. The BLooK LED transilluminator should be used with the supplied power cord. Only these power cords should be used to power the device. Attach the power cord to the BLooK LED transilluminator at the back of the device. Plug the other end of the power cord into a properly grounded electrical outlet, ensuring the correct plug adaptor is attached. Always disconnect the BLooK LED transilluminator from the electrical outlet before cleaning the device. The BLooK LED transilluminator does not produce UV-light; however, it does utilize an intense blue light for viewing gels. It should be noted that published literature has identified blue light as a possible risk factor for macular degeneration; however, no clinical studies have been published. Therefore, the BLooK LED transilluminator amber filter unit provided with this device should be used to protect your eyes while viewing gels. The amber filter unit is NOT a safety screen for UV emission, and will NOT protect your eyes when viewing gels on UV transilluminators. After viewing and documenting the gel or sample, always press the unit off.

1. Manufacturer:
   Taqkey Science Co., Ltd.
   1F., No. 60, Jiabei 2nd St., Jhunan Township, Miaoli County, TAIWAN
   Tel: +886-37-625 816, +886-2-2577 7306
   E-mail: service@taqkey.com

2. Please position and use the LED transilluminator on the level laboratory benchtop.
3. If the LED transilluminator is positioned on the unleveled laboratory benchtop or platform, it may cause the sample gel to slide, thus making the user unable to observe the gel.
4. After the LED transilluminator is switched on for 5 minutes, the automatic disconnecting device will automatically switch off the power source. Please wait for 3 minutes before switching on the device again. If the user doesn't wait for 3 minutes and continuously presses the ON/OFF button, it may cause the device to be overheated and dysfunctional as a result.

Warranty

GeneDireX warrants that BLooK LED transilluminator will be free from defects in material and workmanship for a period of one year from date of purchase. If a defect is present, GeneDireX will, at its option, repair, replace, or refund the purchase price of this product at no charge to you, provided it is returned during the warranty period. This warranty does not apply if the product has been damaged by accident, abuse, misuse or misapplication, or from ordinary wear and tear. This warranty shall be limited to the replacement of defective products. It is expressly agreed that this warranty will be in lieu of all warranties of fitness and in lieu of the warranty of merchantability.