Revised: March 17, 2025

Product Information

Glo-Plate™ White Photoactivation Device

Catalog Number: E90008

Specifications

General Dimensions (W x D x H)	9.65 x 9.57 x 1.81 inches (24.5 x 24.3 x 4.6 cm)
Light Panel Dimensions (W x D)	6.61 x 3.86 inches (16.8 x 9.8 cm)
Voltage Input	100-240 V, 0.8 Amax (converter included)

A universal outlet adaptor is provided for customers outside of North America. This product has a CE marking.

Product Description

The Glo-Plate™ White Photoactivation Device is a lightweight, multi-functional light box that contains LED lights topped with a diffuser, allowing for even illumination across the panel. This device is an excellent light source for developing gels stained with the visible blue DNA gel stain DNAzure®. This novel DNA gel stain precipitates a visible blue dye onto DNA during light exposure, resulting in highly sensitive and stable visible blue DNA bands. The benefit to using DNAzure® instead of fluorescent DNA dyes is that once the stain has developed, the DNA can be visualized by eye, without the need for imaging equipment. This is particularly advantageous for gel excision.

Features:

- Provides even illumination across a wide light area.
- Can be used to develop visible blue DNA bands when using DNAzure® Blue Nucleic Acid Gel Stain (Cat. No. 41020).
- Unit has 120/240V internal converter and is provided with a universal outlet adaptor for customers outside of North America.

DNAzure® Application Notes

DNAzure® Blue Nucleic Acid Gel Stain is an ultrasensitive reagent for visible staining of dsDNA in agarose gels or polyacrylamide gels. The stain is highly sensitive for dsDNA, with a limit of detection of 1 ng dsDNA or less per band. We do not recommend this stain for RNA or ssDNA.

DNAzure® is a DNA-binding dye that turns from colorless to deep blue after binding to DNA and exposure to bright light. Once developed, this blue dye remains visible, without the need for any further light exposure. The Glo-Plate™ White Photoactivation Device is able to quickly and efficiently develop the blue color in DNAzure®-stained gels, with dark bands typically visible after 15 minutes.

Protocol for Using Glo-Plate™ White Photoactivation Device to Develop DNAzure®-stained DNA Agarose Gels

For more detailed information on using DNAzure® Blue Nucleic Acid Gel Stain, please see the protocol on the product page.

1. Place the gel in a clear container, such as a clear plastic or glass dish, and stain your agarose gel for 20-30 minutes in 1X DNAzure® solution.
2. Lift the orange lid of the Glo-Plate™ White Photoactivation Device. Remove the gel from the container and place it on top of a piece of clear plastic wrap directly on the light panel.
3. Place a flat sheet of aluminum foil over the gel with the reflective side facing down toward the light to reflect light back onto the top of the gel. Lower the orange lid.

   Note: Alternatively, you can omit the aluminum foil so that you can view bands developing through the orange lid. However, the DNAzure® development may be less effective.
4. Turn the Glo-Plate™ White Photoactivation Device on. The power switch is located on the front of the device.
5. Leave the agarose gel exposed to the Glo-Plate™ White Photoactivation Device light for the desired length of time.

   Note: We recommend 15-30 minutes of light exposure. DNA bands may be visible after 5 minutes, with dark blue bands apparent after 15 minutes.
6. Once light exposure is complete, turn off the device.

Warranty

Biotium warrants that this product will be free from defects in material and workmanship for a period of two (2) years from date of purchase. If a defect is present, Biotium will either, at its option, replace the product or refund the purchase price at no charge to you, provided the product 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. For your protection, items being returned must be insured against possible damage or loss. Biotium cannot be responsible for damage incurred during shipment of the instrument; it is recommended that you save the original packing material in which the instrument was shipped. 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.

Obtaining Service

Contact Biotium Technical Support at 800-304-5357 or send an email to techsupport@biotium.com and describe the problem(s) you are experiencing. Carry out any suggested modifications or tests. DO NOT ship a device to us without first obtaining a Return Authorization form from us. If it is determined by the Biotium Technical Support representative that the device should be replaced, a Return Authorization number will be assigned and you will receive instructions for the return. If the device is under warranty, Biotium will replace the unit and pay for return shipment.

Safety Information

The Glo-Plate™ White Photoactivation Device is an electrical device. Plug the power cord into a properly grounded electrical outlet. If the device is not used for a long period, it is recommended to disconnect the power cord from the electrical outlet. Disconnect the device from the electrical outlet before cleaning it. The Glo-Plate™ White Photoactivation Device is not water-proof. Do not submerge it in water. To clean the stage area, we recommend wiping down the surface with a small amount of 10% bleach or 70% ethanol, followed by a wipe with water. Do not soak. Do not look directly at the LEDs for a prolonged period of time. Although no clinical studies have been published, bright light is a possible risk factor for macular degeneration.

Related Products

Cat. No.	Product
41020	DNAzure® Blue Nucleic Acid Gel Stain, 100X
E90007	Glo-Plate™ 2.0 Blue LED Illuminator
E90005	Gel-Bright™ Laser Diode Gel Illuminator
31030	DNA Gel Extraction Kit
99859-1	6X DNA Loading Buffer (Orange)
99962-1	6X DNA Loading Buffer (Blue)
31084	1 kb DNA Ladder, Ready-to-Load
31085	100 bp DNA Ladder, Ready-to-Load
31080	1 kb DNA Ladder in TE Buffer
31081	100 bp DNA Ladder in TE Buffer
22031	1X TAE (1L) Buffer Powder Packets
22032	1X TBE (1L) Buffer Powder Packets
22033	1X PBS (2L) Buffer Powder Packets
41039	Go-Go™ Fast DNA Gel Running Buffer, 50X
41006	TBE Buffer, 5X
41028	Agarose LE, Ultra-Pure Molecular Biology Grade
41024	Water, Ultrapure Molecular Biology Grade
31066	AccuGreen™ High Sensitivity dsDNA Quantitation Kit
31069	AccuGreen™ Broad Range dsDNA Quantitation Kit
31060	AccuBlue® NextGen dsDNA Quantitation Kit
31028, 31029	AccuClear® Ultra High Sensitivity dsDNA Quantitation Kit with DNA Standards
31006	AccuBlue® High Sensitivity dsDNA Quantitation Kit with DNA Standards
31007	AccuBlue® Broad Range dsDNA Quantitation Kit with DNA Standards

Please visit our website at www.biotium.com for information on our life science research products, including environmentally friendly EvaGreen® qPCR master mixes, nucleic acid gel stains, DNA and RNA extraction kits, and nucleic acid quantitation kits.

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