

# Make the move to *Blue* ...the smart alternative to UV

- Blue light does not damage nucleic acids
  - Improved downstream cloning efficiency
- Uniform Illumination (UI) technology
  - Provides an evenly lit surface
  - Bottom up lighting, no reflection
- 465nm wavelength
  - Optimal for green alternatives to EtBr
- Two position amber filter cover
  - Angle for easy gel access
  - Remove for gel imaging



# SMARTBLUE™ BLUE LIGHT TRANSILLUMINATOR

## *Safer for samples, safer for you*

New fluorophors have been developed to replace the traditional method of nucleic acid detection with toxic Ethidium bromide. They also eliminate the use of DNA damaging UV light, as they are visualized with blue light. The *SmartBlue* Transilluminator is the perfect partner for these new stains. It emits blue light at a wavelength of 465nm, perfect for excitation of most green fluorophors, including Accuris' *SmartGlow*™, as well as many protein stains. Exposing DNA to this wavelength does not cause damage, and results in a much higher downstream cloning efficiency as compared to even short UV light exposures. In addition, the visible blue light is not damaging to the skin and is less harmful to the eyes.\*

## *Two position filter cover*

The *SmartBlue* transilluminator requires no special shielding, however, the light does need to be filtered for visualization of the dyes. The amber cover, which rests above the viewing surface and gel, filters out the blue light, allowing the bands to be seen clearly. The cover can be placed at a 60° angle to provide easy access to the gel for band excision. For documentation, the filter cover is easily removed completely.

## *UI technology: bright and clear images*

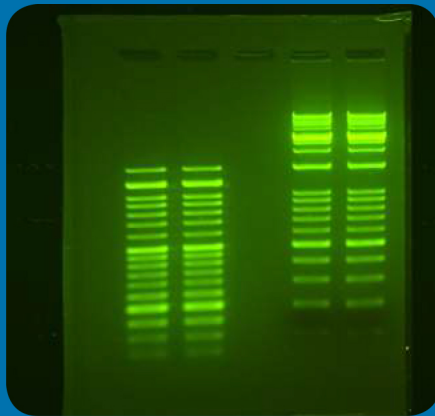
Engineered diffusers and filters provide an extremely evenly lit viewing surface. Even in ambient light, bands of DNA can clearly be seen in gels. Images obtained using the *SmartBlue* Transilluminator are brighter and more balanced than those obtained using epi-illuminators which light from the sides.

## *Reliable, durable and long lasting*

An array of super bright LEDs with a long, 30,000 hour service life provide the light source for the *SmartBlue* Transilluminator. Unlike those in a UV transilluminator, the filters in the *SmartBlue* will not solarize and degrade in performance over time. Gel bands can be excised directly on the scratch resistant, glass viewing surface. To save energy, the power switch includes an automatic 5 minute shutoff. The *SmartBlue* Transilluminator is covered by a 2 year warranty.



*Amber cover raised for  
easy gel access*



*Markers stained with SmartGlow™  
Imaged with SmartDoc™*



*Use with SmartDoc™ for gel  
imaging with a cell phone*

## Specifications

Light source	High intensity LEDs	Output wavelength	Peak at 465nm
Filter cover	Amber, for filtering of blue light	Viewing surface	6.6x4.75 in/17x12 cm
Exterior dimensions	12.8x8.5x1.9 in/30.5x21.5x5 cm	Weight	1.2 kg/2.6 lb
Electrical	100-240V, 50/60Hz	Warranty	2 years

## Ordering Information

E4000	<i>SmartBlue</i> Transilluminator, includes amber filter cover, 120V
E4000-E	<i>SmartBlue</i> Transilluminator, includes amber filter cover, 240V
E5000-SD	<i>SmartDoc</i> Imaging Enclosure for use with a smart phone
E5000-590	590nm filter, for removal of blue light in the <i>SmartDoc</i>
E4500-PS	<i>SmartGlow</i> Pre-stain for nucleic acid gels
E4500-LD	<i>SmartGlow</i> Loading dye with stain for nucleic acid gels

\*Due to the high intensity of the LED lights, it is recommended not to stare directly at the viewing surface without the amber cover in place. The *SmartBlue*™ device uses technology under license from Clare Chemical Research, Inc. and is covered under US and International Patents.

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