Clarit-E DNA-View Electrophoresis System

A Safer Alternative to Traditional Electrophoresis

Traditional electrophoresis methods use a combination of harmful UV light and toxic ethidium bromide to visualise DNA samples in a gel. Intense UV light such as that typically used in transilluminators, can cause skin burns and damage to eyes in a very short exposure time. In addition UV can cause cross-linking of DNA and mutagenesis, thereby reducing cloning efficiency. Ethidium Bromide, though still one of the most widely used DNA stains for electrophoresis, is a known carcinogen and mutagen and should always be used with caution.

Blue LED lights can also be used to cause emission of fluorescence although the wavelength is different to UV, and fluorescence is never as strong as more traditional UV and stain combinations. But with safe proprietary stains, and blue LED illumination, it is possible to visualise DNA gels, without the worry of handling harmful chemicals, or exposure to UV light.

The DNA-View system enables you to do this. What's more, the DNA-View system enables you to see your samples separating in real time, and it can even be used to simplify sample recovery by using a 2 tier Well approach.

Built around the versatile Choice Horizontal Gel system, DNA-View comprises a bluView base station which incorporates the blue LED illuminator and power supply. The base station exactly fits the Choice Gel tank which is supplied with a special lid incorporating a light filter and extractor fan which eliminates condensation to optimise visualisation and resolution during electrophoresis. For completeness, a selection of combs are included suitable for gel resolution or sample preparation.



Features

- Versatile, highly compact, self-contained system: for convenience
- Flexible high resolution system: for many different applications
- Integrated tank, power supply and gel illuminator: saves time and space
- Safety for users: no dangerous UV
- Safety for samples: no mutagenesis of DNA, no compromise on cloning efficiency
- Real time visualisation of gel run: no over-runs
- Simplifies DNA elution: simple ethanol precipitation from buffer
- No need for expensive pre-made gels: lab-cast gels work perfectly and save you money
- Current Choice gel tank users upgrade available: cost-effective solution
- Optional Gel Documentation System with 12.1 megapixel digital camera
- Complete ready-to-use system excluding chemicals and reagents

Applications

- Resolution of DNA samples
- Simple DNA recovery
- Track DNA without harmful UV
- Save on time-consuming gel elution techniques
- Teaching electrophoresis

DNA-VIEW

Catalogue Number	Description			
EL1560	DNA-View system complete with 15 x 7cm gel tray, 1 set of casting dams $% \left(1,1,2,2,3,3,3,3,3,3,3,3,3,3,3,3,3,3,3,3,$			
EL1565	DNA-View system complete with 15 x 10cm gel tray, 1 set of casting dams			
EL1570	DNA-View system complete with 15 x 15cm gel tray, 1 set of casting dams			
EL1575	DNA-View system complete with 15 x 7, 15 x 10 and 15 x 15cm gel trays, 3 sets of casting dams			
EL1555	DNA-View base station & bluVIEW lid			
EL1580	DNA-View gel documentation hood with 12.1MP camera			
EL1585	DNA View Darkroom viewing hood			
All DNA-View systems are supplied with 8 double-sided and 4 extra thick preparatory combs				

DNA-View Stain	Compatibility	Staining Method		
Nucleic Acid Stain	Relative Performance Between Stains	Gel Pre-Staining	Gel Post-Staining	Sample Staining
SYBR [®] Green I (DNA)	Higher Intensity Bands Observed	1	 Image: A second s	1
SYBR [®] Green II (RNA)	Higher Intensity Bands Observed		 Image: A second s	1
SYBR [®] Gold	Higher Intensity Bands Observed	1	 Image: A second s	
Midori Green Direct	Higher Intensity Bands Observed			1
Hydra Green™ Safe DNA Dye	Higher Intensity Bands Observed	1	 Image: A second s	
HD Green™ DNA Stain	Higher Intensity Bands Observed	1	 Image: A second s	
runSAFE	Higher Intensity Bands Observed			1
SafeView DNA Stain	Compatible -Visible Bands Observed	1		
SYBR [®] Safe	Compatible -Visible Bands Observed	1	×	
Midori Green	Compatible -Visible Bands Observed	1	 Image: A second s	
Midori Green Advanced	Compatible -Visible Bands Observed	v	 Image: A second s	
EtBr	Faint Bands Observed*	1	 Image: A second s	
SERVA DNA Stain Clear G	Faint Bands Observed*	1		
HealthView™	Faint Bands Observed*	1	 Image: A second s	
GelGreen™	Faint Bands Observed*	1	 Image: A second s	
GelRed™	Faint Bands Observed*	✓	 Image: A second s	

DNA-View Stain Compatibility









*Compared to the same gel on a UV Transilluminator

Technical Specifications

DNA-View Viewing Dock and System							
Blue Light	470nm	Timer	1-999 minutes with alarm				
Voltage/ Resolution	25-150V / 1V	Safety Device	No load detection				
Current/ Resolution	300mA / 1mA	Operating temperature	Ambient to 40°C				
Power	30 W	Dimensions	293 x 220 x 80 mm				
Operating Mode	Constant Voltage	Rated Voltage	100-240V, 50/60Hz				
Gel Dimensions (W x L)	15 x 7, 15 x 10 & 15 x 15 cm	bluVIEW Lid Design	Orange (EtBr) Amber (runSAFE & SYBR stains)				
Built-in extractor fan	Powered by base unit.	Unit dimensions (w x d x h)	26.5 X 17.5 X 9cm				
Buffer volume	500ml						
Combs included	2x Comb 1 & 2 sample, 1mm thick 2x Comb 4 & 16MC sample, 1mm thick 4x Comb 20 & 28MC sample, 1mm thick 2x Comb 4 sample 2 Marker, 3mm thick 2x Comb 6 sample 2 Marker, 3mm thick						

N.B. Combs cannot be changed with this system

Supplied with a standard UK 3-pin plug. If you require a different style please specify when ordering.



Electrophoresis - DNA-View