

runDOC

GEL DOCUMENTATION

runDOC is a portable, lightweight gel documentation system designed exclusively for use with runVIEW. runDOC comprises a darkroom hood and a high resolution digital camera to capture images of nucleic acid gels stained with EtBr, SYBR and runSAFE. Its 12.1 megapixel camera with 2GB memory card allows storage of images in RAW and JPEG formats.

The runDOC darkroom is placed quickly and easily over the runVIEW gel tank located on the runVIEW base unit, which includes an integrated power supply and blue LED gel illuminator. The blue LED illuminator provides the excitation source for the DNA gel located within the tank, and following excitation the light emitted is then visualised using either one of the bluVIEW lid options (supplied and used with the runVIEW gel tank) or the runDOC filter slide. The interchangeable filter slide and bluVIEW filter options offer full flexibility: amber filter for runSAFE, SYBR and green fluorescence; and orange filter for EtBr and red fluorescence.

runDOC may be also used like an ordinary gel documentation system - by placing the gel tray directly on the runVIEW base station, which acts as a transilluminator. runDOC is available as a complete system with laptop and software.



Hood is positioned over the runVIEW tank and base unit to create a light-tight environment suitable for image capture



Technical Specifications

CAMERA

TYPE	5x OPTICAL / 4x DIGITAL ZOOM
EFFECTIVE PIXELS	12.1MP
IMAGE SIZE	640x480 UP TO 4000x3000
SENSOR	1/1.7" TYPE HIGH SENSITIVITY CMOS
FILE FORMAT	RAW, JPEG
COMPUTER INTERFACE	USB 2.0 HI-SPEED (MINI- B-JACK)
VIDEO OUT	NTSC / PAL
STORAGE MEDIA	8GB SD MEMORY CARD

LENS

FOCAL LENGTH	6.1-30.5 MM
MAXIMUM APERTURE	F/1.8(W)-F/2.9(T)
SHUTTER SPEED	15-1/4000S

EMISSION FILTER OPTIONS

RUNDOC FILTER SLIDE	ORANGE FILTER FOR ETBR; AMBER FILTER FOR SYBR AND RUNSAFE
BLUVIEW LID OPTIONS*	BLUVIEW-ORANGE FOR ETBR; BLUVIEW-AMBER FOR SYBR AND RUNSAFE

DARK ROOM

CAMERA HOLDER MATERIAL	POLYOXYMETHYLENE (POM)
DARKROOM MATERIAL	EBONY ACRYLIC
DIMENSIONS / WEIGHT	40x34x19.5cm (HxWxD) / 0.8kg
POWER	RECHARGEABLE LI-ION BATTERY AND PLUG-IN CHARGER OPTIONAL MAINS CABLE CHARGER

*ONLY WITH RUNVIEW

runSAFE

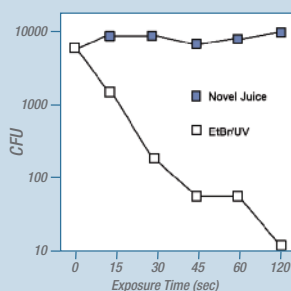
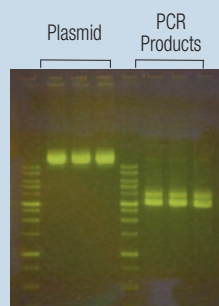
The runSAFE Range comprises four non-mutagenic stains that produce instant visualisation of DNA bands upon irradiation with blue light or UV in agarose or polyacrylamide gels. Each stain is conveniently supplied in a 6x loading dye which is mixed with 5 parts double-stranded DNA before loading onto an agarose or polyacrylamide gel. The individual colour constituents within each loading dye track electrophoresis run progression, and indicate the extent of band separation and resolution by co-migrating with DNA bands of known molecular size, which varies according to the gel percentage. All four stains are non-toxic, safe for the environment and can be disposed of in the regular laboratory waste without using expensive decontamination methods. Each stain is sensitive and binds DNA to detect as little as 0.2ng DNA per band within a gel; while gel imaging is best performed using the amber emission filter found of the bluVIEW lid or runDOC filter slide. The runSAFE Range comprises the following:

runSAFE – general purpose stain for DNA ranging from 50bp markers to large super-coiled plasmid
runSAFE-PLUS500 – for DNA larger than 500bp in size;

- runSAFE-2000 – for DNA vectors and inserts ranging from 500-2000bp;
- runSAFE-500 – for small DNA fragments, PCR products, sequence tracts and primers less than 500bp.



runSAFE Range - Less DNA damage, improved cloning efficiency



Blue LED System

Slower migrating species, indicative of a linear or relaxed circular vector, resulting from DNA nicking or strand breaks, are significantly reduced in DNA plasmid mixed with runSAFE and exposed to blue light. The concentration of nicked DNA plasmid increases significantly after 8' of exposure to EtBr and UV irradiation.

- SAFE – ALL FOUR RUNSAFE STAINS HAVE ULTRA-LOW TOXICITY (LC>5000MG/KG) AND LACK CELL PERMEABILITY
- CONVENIENT – EACH STAIN IS SUPPLIED AS A READY TO USE 6X LOADING DYE; SIMPLY ADD 1 PART STAIN TO 5 PARTS DNA, MIX AND LOAD YOUR GEL
- FAST – NO TIME-CONSUMING POST-STAINING OR DE-STAINING OF GELS IS REQUIRED.
- SENSITIVE – VERY LOW BACKGROUND STAINING OF THE GEL; DETECTS AS LITTLE AS 0.2NG DNA PER BAND
- FLEXIBLE – EACH STAIN MAY BE USED WITH BLUE OR UV LIGHT

ORDERING INFORMATION

RVGELDOC	runVIEW Gel Documentation Hood with 12.1MP camera	RVGELDOC-F2	Amber Filter for runDOC (runSAFE and SYBR stains)
RVGELDOCSYS	runVIEW Gel Documentation Hood with camera, laptop & 1D Analysis Software	CAMCHARGER	Optional Mains Charger Cable for 12.1MP camera
RVGELDOC-F1	Orange Filter for runDOC (Ethidium Bromide)	RVSTATION	runSTATION complete with RVGELDOC and RVMSCHOICETRIO
runSAFE	Description	Tracking Dyes	Size Range
RUNSAFE	runSAFE Stain, 1ml	Bromophenol Blue, Xylene Cyanol FF, Orange G	50bp – 20Kb
RUNSAFE-PLUS500	runSAFE-PLUS500 Stain, 1ml	Bromophenol Blue, Xylene Cyanol Blue	>500bp
RUNSAFE-2000	runSAFE- 2000, 1ml	Xylene Cyanol Blue, Orange G	500-2000bp
RUNSAFE- 00	runSAFE-500, 1ml	Orange G	<500bp