KuikQuant Digital Western Blot Detection System

Switches and Connections



KQ Pluto Serial Exposure Remote Control Unit









Install KwikQuant Imager Manager:

1. Download the latest software at <u>www.kindlebio.com;</u>

2. Change the setting on the imager as the following (For detailed instruction, please see the video instruction here: https://youtu.be/xwlqQhsSDuk

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	IMAGE SIZE	C 3:2
1	IMAGE QUALITY	F+RAW
	DYNAMIC RANGE	AUTO
	FILM SIMULATION	ŝœ
	FILM SIMULATION BKT	

Old setting



New setting

Operating the camera for Western Blot

- 1. Power on the camera, and power on KQ Pluto remote control.
- 2. Turn on the computer, launch KwikQuant Image Manager.
- 3. Turn the camera function wheel at "Chemi", and turn the camera lens setting at "WB".



4. Rinse the membrane briefly in <u>dI water</u>.



5. Submerge the blot in <u>diluted* XuikQuant Digital-ECL</u> solution for 2 minutes. (*For ECL substrate solution dilution: mix dl water with 1/10 volume of solution A and 1/10 volume of solution B.) Use a minimal of 1mL solution for each 10cm² membrane.

6. Transfer the membrane on the white sample plate, facing up. <u>Press and hold</u> Pluto's trigger button for 2 seconds until the camera starts to work, taking 1", 2", 4", 8", 15", 30", 1', 2', and 4' exposures. All images will be automatically transmitted to and saved in "Western Blot" folder on the computer. Watch the images on the camera, if the exposure is adequate, quickly click the trigger button to stop the serial exposure at any time.

7. If the images don't appear using the diluted ECL substrate solution, use non-diluted solution and repeat step "5-6".

8. Once the chemiluminescent image of the blot is obtained, remove the rubber plug on the camera body. <u>Press and hold</u> Pluto's trigger button for 2 seconds until the camera starts to work, taking bright field images of the blot. Click the trigger button again when bright images of the molecular markers are shown are the camera.

9. After all exposures are finished, make sure all images are transferred to the computer and displayed on KQ Image Manager. Delete all images on the camera.

10. Power off KQ Pluto remote control and the camera.

Operating the camera for DNA/RNA agarose gels or Coomassie Blue Stained SDS Page gels

1. Power on the camera, and power on KQ Pluto remote control.

2. Turn the camera function wheel at "UV" (for DNA/RNA agarose gels) or "White" (for Coomassie Blue stained SDS PAGE gels), and turn the camera lens setting at "UV/White".



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3. Put the gel on a UV transillumator (for DNA gels) or white light table (for SDS PAGE gels), turn on the power.

4. Click the trigger button on Pluto, and take a photo.

5. The image appears on the camera screen (Camera X-A10), or the user needs to press camera's play button to show the picture (camera X-A2).

6. Transfer the image to a computer using either wireless transfer or direct image transfer on the SD card.

7. Follow the on screen command after launching KwikQuant Image Analyzer.

Image processing

1. Launch the most updated KwikQuant Image Analyzer;

2. Follow the on-screen command to proceed image processing and analysis;

- 3. adding molecular markers to WB images:
- 1) display your ideal WB image on the main window;
- 2) use the mouse to scroll the preview images on the right side until you find the molecular marker image;
- 3) click on the marker image, the marker image will be merged on the main window image.