

UV Imaging with the GelDoc™ XR

Step 1:

Open Quantity One Software and select File>GelDoc XR or choose Select Scanner from the Quick Guide.

Step 2:

Select **UV Transillumination** for the Application in Step I.

Step 3:

Move the filter handle on top of the instrument to the ‘one’ position. (Filter lever in middle position in the metal frame of instrument)

Step 4:

Place your sample in the center of the transilluminator. Turn on **Epi white** light on the enclosure of the imager, (or just use ambient light and hold the door slightly open) and position your sample and close the door. Click on the **Live/Focus** button in Step II and adjust iris setting to where you get a good exposure using the open or close arrow keys in the software (or touchpad on enclosure)

Step 5:

Zoom in so that your blot takes up as much of the display window as possible. Re-center blot with your hand if necessary.

Step 6:

Close the door and turn on the **UV** lights. Adjust iris setting and zoom as necessary

Step 7:

Focus on standards, wells, or the edge of the blot, by using the focus buttons in Step II. Alternatively, use the fluorescent ruler to focus for best definition. When focusing is complete, click on the **Freeze** button.

Step 8:

Make sure the “Highlight saturated pixels” box is checked

Step 9:

Select **Auto Expose** if you are unsure of the exposure time you wish to use or enter the exposure time in seconds and select **Manual Expose**. Once your image is exposed, click on “analyze” and your image will pop up on the screen. It can then be analyzed, printed or saved.

White Light Imaging with the GelDoc™ XR

Step 1:

Open Quantity One Software and select File>GelDoc XR or choose Select Scanner from the Quick Guide.

Step 2:

Select **White Transillumination** for the Application in Step I.

Step 3:

Move the filter handle on top of the instrument to the 'one' position. (Filter lever in middle position on the metal frame of instrument) Place the white light conversion screen on the transilluminator.

Step 4:

Place your sample in the center of the white light conversion screen. Turn on **Epi white** light on the enclosure of the imager, (or just use ambient light and hold the door slightly open) Click on the **Live/Focus** button in Step II and adjust iris setting to where you get a good exposure using the open or close arrow keys in the software (or touchpad on enclosure)

Step 5:

Zoom in so that your blot takes up as much of the display window as possible. Re-center blot with your hand if necessary.

Step 6:

Close the door and turn on the **UV** lights. Adjust iris setting and zoom as necessary

Step 7:

Focus on standards, wells, or the edge of the gel, by using the focus buttons in Step II. Alternatively, use the ruler to focus for best definition. When focusing is complete, click on the **Freeze** button.

Step 8:

Make sure the "Highlight saturated pixels" box is checked

Step 9:

Select **Auto Expose** if you are unsure of the exposure time you wish to use or enter the exposure time in seconds and select **Manual Expose**. After your image is exposed, click on 'analyze' and your image will pop up on the screen. It can then be analyzed, printed or saved.

Volume Quantitation with the GelDoc™ XR

Step 1:

Open the “Volumes Quick Guide” from the “Help” menu on the toolbar and open the image to be analyzed.

Step 2:

Select one of the volume tools (generally **Volume Rectangle Tool** for the Application).

Step 3:

Move your mouse over the band you wish to quantitate and drag the pointer to form a rectangle that encompasses the volume. (band) To select additional bands hold the control key and use the mouse to drag the box and surround additional bands.

Step 4:

If you wish to set “standards” or “global” background, double click on the specific unknown and a box will open giving you the option to change the unknown to a standard or a background.

Step 5:

Once you have all volumes selected and assigned, click on **Volume Analysis Report** from the Volumes Quick Guide. Using the check boxes, select the parameters you want on your report and then click done. Your report will appear on the screen.