04_07 Documentation with BioRad Photographer

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Goal-Setting

- Photographing a gel

Terms / abbreviations

- UV = Ultraviolet

Risk areas

Hazard symbols

Required materials and / or information

- Agarose gel

Templates, devices, software

- Gel Doc XR+ BIO RAD
- Software ImageLab 5.0

Preliminary work

- 01_03 Performing Agarose Gel Electrophoresis

Operation

- For agarose gels do not use the white plate!

1. Gently lay the gel on the dark plate, avoid bubble formation by placing one corner down first, then slowly the rest of the gel until the last corner touches the surface; maybe move it back and forth through the liquid film
2. Click on the PC on new protocol (it does not matter if there is still an old picture open)
3. Click "select --> nucleid acid --> SYBR-Safe Gold Stain"
4. Click "position gel" and align it with the lines, there the scale can be bigger or smaller (if the gel can not be seen, turn the hand gear at the top of the photographer on "no filter" --> make sure to turn the hand gear back to "agarose filter" before taking the picture!
5. SYBR Gold imaging can/may be better with the SDS-filter!
6. Click on "run protocol"
7. Editing and Optimizing:
    a. Rotation: use the image tool "Custom" to align the picture, save the changes with a right click and "rotate"
    b. Cropping: use the tool "crop", crop the picture and save with right click and "crop"
    c. Inverting: click on "Invert data"

    d. Contrasting: change the contrast for better visualization, choose the small sun icon , tick of "invert image display" and "highlight saturated pixels" --> play around with the saturation until the bands can be seen the best
8. Save the image
9. Export as ".jpg." by clicking on the screenshot icon

Operation in Pictures_Documentation-with-BioRad-Photographer_210527_ZT.pdf

Disposal

- Gels are discarded into solid waste in the white trash can in the gel electrophoresis room

Troubleshooting

- None

Follow-up work

- Purify the DNA out of agarose gels with a cleanup-kit