

SAFE OPERATING PROCEDURE (Agarose Gel Imaging and Photography)

LOCATION DETAILS

School/Branch: Medical Sciences, Pharmacology N533

SAFE OPERATING PROCEDURE DETAILS

Task/activity (including specify particular equipment, substance)
Agarose Gel Imaging and Photography

Date prepared:
24/7/2008

PREPARED BY Name, Position and Signature (insert names of the supervisor, HSR, HSO and operator involved)

Name Dr Janet Coller
Gordon A. Crabb

Position FTT Fricker Research Fellow
Lab Manager, HSO

Signature



RISK ASSESSMENT

Has a risk assessment been completed and have all other environmental considerations been made?

Yes No

See Risk Assessment dated:
24/7/2008?

Risk Rating: Low
 Medium
 High
 Very High

SAFE OPERATING PROCEDURE DETAILS

Procedure (Include control measures listed in risk assessment within the procedure):

Safety Precautions:

The following safety precautions must be adhered to:

- Laboratory coat, safety glasses and nitrile gloves must be worn at all times, and heat proof gloves when handling the hot agarose solution.
- Any spills must be cleaned up immediately with copious amounts of water followed by spraying with 70% ethanol located in the lab.
- All waste (tubes, pipette tips, gloves, paper towel from wiping down benches and equipment) must be disposed of in the yellow biohazard bag.
- All equipment must be checked for in date electrical safety tags, do not use if out of date and inform Dr J Coller immediately.

Procedure:

YOU MUST BE TRAINED PRIOR TO PERFORMING THIS PROCEDURE. ANY EXPOSURE TO UV LIGHT CAN CAUSE FLASH BURNS TO EYES AND SEVERE SKIN BURNING – YOU MUST WEAR LABORATORY COAT, NITRILE GLOVES, AND UV GLASSES AT ALL TIMES. NO GEL IMAGING OR PHOTOGRAPHY IS TO BE PERFORMED OUTSIDE OF NORMAL BUSINESS HOURS.

1. Once agarose gel has been run, and gel tray removed from tank on to paper towel, carry to area for gel imaging and photography in N533.
2. Spray down surface of UV light box with 70% ethanol and wipe clean with a Kimwipe – do not use paper towel as this leaves residue on the light box that will affect imaging and photography.
3. Place UV shield on top of light box and then slide agarose gel from the tray on to the remaining section of the light box. Place the digital camera on top of gel and switch the power on at the back.
4. Turn on computer and log on using the username: “gel user”. No password is needed. Once logged on, open Kodak imaging software and follow prompts to bring up screen that controls camera.
5. Put on the **UV protective glasses provided** and inform all other people in the lab and office that you will be taking a photo of the gel – ensure that the door to the lab is closed so that no person can enter whilst taking the photo.
6. Follow software prompts to take the photo, turning the UV light box on only when required. Once the photo is on the screen turn off the light box immediately.
7. If you need to view the gel after the photo is taken for further clarification of bands, **you must wear UV face shield in addition to UV glasses for protection of face.**
8. Put gel back onto gel tray and carry to yellow biohazard bin for disposal. Wipe down the top of the UV light box with 70% ethanol and wipe clean with Kimwipe, which needs to be disposed of in yellow biohazard bag.
9. Rinse gel tray with copious amounts of water in sink and leave to dry on sink edge.
10. Wipe down all working surfaces with 70% ethanol.
11. Re-use nitrile gloves until they begin to discolour (ie fade from dark to pale blue), then dispose of in yellow biohazard bag.

IF FLASH OR SKIN BURNS OCCUR INFORM DR J COLLER OR MR GORDON CRABB IMMEDIATELY FOR MEDICAL ASSISTANCE

Contact person for this SOP: Dr J Coller, Rm N502, ext 33906

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Note: This Safe Operating Procedure must be reviewed :

- a) after any accident, incident or near miss;
- b) when training new staff;
- c) if adopted by new work group;
- d) if equipment, substances or processes change; or
- e) within 5 years of date of issue.