

AUTORADIOGRAPHY OF CELL SMEARS

- MATERIALS:
1. Kodak NTB-2 Emulsion (Gel) (shelf life 2 months)
 2. 42° water bath
 3. Emulsion container to accomodate 2 slides back to back which can be used in waterbath.
 4. Slides of cells smeared, washed with ETDH and dist. H₂O. Slides should be single end and side frosted to distinguish ²cell sides of slides the darkroom.
 5. Black plastic slide box with dessicant taped inside in lens paper.
 6. Staining dishes with rack to process slides.
 7. Developer:
 - Make fresh 200 ml H₂O
 - 31 gm Kodak D 19
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8. Stop bath Make fresh 195 ml H₂O
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9. Fixer
- 5 ml Kodak stop bath
 - 48 ml solution A
 - 147 ml H₂O
 - 5 ml Solution B (hardener)

METHOD: I Slide preparation

1. Prepare cell smears in usual way with 95% ETOH fixation.
2. For cytoplasmic staining, process as usual and score slides. Then ,
3. Dry slide in air. *remove coverslip & wash 2 ETOH and distilled H₂O*

II. Adding Emulsion (dark room)

1. Main light switch in McDevitt's ^{darkroom} ~~lab~~ turns on water bath. Change water and refill water bath to fill line. Check temp with thermometer until it reaches 42°. Turn out white light with chain switch, leaving only red light on.
2. Spoon out gel into Gunter's glass emulsion container and let liquefy at 42° for approx. 20 minutes in dark.
3. Dip 2 slides (back to back) into container to coat up to frosted area. Check with test slide to gauge level of emulsion.
4. After checking % slide coated using the red light, dry the edges of the slides with filter paper strips and set in black slide box on an angle to drain excess emulsion. Do not let successive slides touch each other.
5. Leave open black box (slides held in with rubber band) with slides in a dark covered area for 2 hours till they dry.
6. When dry, tape top closely on box and store in refrigerator free of radioactivity for a length of time dependent on how many grains you want visible. 20 hrs. - 3 weeks.

III. Developing Emulsion

1. Process slides in dark in staining dishes.
 - a. Developer - 2 min dip
 - b. Stop bath - 2 sec dip
 - c. Fixer - 5 min dip
2. Wash for 2 hours in the light.
3. Air dry and score