

# SILVER STAINING GELS

## Stain

1. Fix gel in 50 % methanol, 12 % acetic acid for 20'.
2. Wash in 10 % ethanol, 5 % acetic acid 3 x 10'.
3. Soak in **1 x dichromate mix** for 5'.
4. Rinse 4 x 30 sec in dH<sub>2</sub>O.
5. **Stain** for 30'. For first 5' expose to relatively intense uniform light - fluorescent is best.
6. Rinse 2 x quickly in **developer**.
7. Leave in **developer** until bands are clear - 5-10'
8. Stop reaction by discarding developer and adding 1% acetic acid.
9. Wash and store in dH<sub>2</sub>O

### 10 x dichromate mix (100 ml)

K <sub>2</sub> CrO <sub>3</sub>	1 g
70% HNO <sub>3</sub>	250 µl

### Stain (100 ml)

0.012M AgNO <sub>3</sub>	2 g
--------------------------	-----

### Developer (100 ml)

0.28M Na <sub>2</sub> CO <sub>3</sub>	2.97 g
0.02% formaldehyde	50 µl 37%

## Destain

If bands look quite heavy, destain until background looks good.

If bands are light, destain and then stain again (pick up from step 5). Can be destained again to reduce background if necessary.

Stock solutions:        250 mM Na thiosulphate  
                                 250 mM K- ferricyanide

Dilute and mix to 2.5 mM each just before using.

Destain 1 - 5'. Stop with several dH<sub>2</sub>O washes.