

## Purification of DNA Oligos from Gel

- 1) Resuspend the oligos in water or TE buffer.
- 2) Pour Native-PAGE at appropriate concentration for size of oligos.  
ie. 20% Native PAGE for 15mer-20mer

Make PAGE gel with 0.5X TBE buffer > ddH<sub>2</sub>O, acrylamide, TBE buffer.  
Does not need stacking gel.

- 3) Load samples with loading buffer without dye. Add one lane with dye at far right or left lane.
- 4) Run Gel in 0.5X TBE buffer at 150-400V COLD. Gel heats up. Make sure buffer is enough to keep gel cold. Use cooling chamber or cold room.
- 5) Run to approximately  $\frac{3}{4}$  of the way to the bottom of the gel. Use mini gel.
- 6) Remove gel. Place on saran wrap. Place on TLC Fluorescence Plate. UV shadow with short wavelength light.
- 7) Mark dark DNA shadows with a pencil.
- 8) Cut out the band (in as small a piece as possible). Cut the gel slices into many small pieces. Place in 1.5ml eppendorf tube.
- 9) Add 500ul 0.3M NaAcetate (pH 4.8-5.2). Shake O/N at 37C in a vortexer.
- 10) Spin out gel slice (Save and redo if necessary). Phenol/CHCl<sub>3</sub> extract.  
Precipitate with ethanol and acetate O/N at 80 C. Wash 2X with 70% ethanol to remove salt.
- 11) Resuspend in sterile H<sub>2</sub>O or TE buffer. (Use approx. 105ul)
- 12) Spec for concentration (use 5ul/500ul dilution 1:100)