**Zymo purification of DNA**

The Zymo kit is in the blue Qiagen box located on the shelf above the shaker table.

**Recovery of DNA from gel**

1. Run DNA on gel, separating desired fragment from all others by running the DNA out long enough to get a clean separation.

2. Excise DNA band from gel using a new, single-edged razor blade. Take care not to contaminate desired DNA with neighboring DNA. Transfer DNA/gel to 1.5 ml microtube using forceps.

3. Determine weight of gel piece by weighing empty tube and subtracting weight from that of the tube containing the gel. Multiply the weight of the gel in mg by 3 and add that volume (in µl) of **ADB Buffer** to the tube.

4. Incubate the tube at 50°C for 5-10 minutes to dissolve the gel piece. Occasionally gently mix the solution during the incubation to promote solubilization of the gel.

5. During this time place water into new small centrifuge tube and place in hot water bath to begin heating elution water.

6. Transfer the melted agarose to a **Zymo-Spin column** that you have placed in a collection tube.

7. At this time, increase hot water bath to 65 degrees to heat elution water to final temperature.

8. Centrifuge the column/tube assembly at full-speed for 30 seconds. Discard the flow through.

9. Add 200 µl **Wash buffer** to the column and re-centrifuge at full speed for 30 sec. Discard the flow through. Repeat the wash step.

10. Elute DNA from column by placing the column in a large centrifuge tube then placing 15µl of 65 degree water on the column for 1 minute then centrifuging at full-speed for 30 seconds. Repeat elution in same centrifuge tube.

**Purification of DNA sample**

1. Add 2 volumes of **DNA binding buffer** to each DNA sample. Mix briefly by vortexing. (e.g. if you have 50 µl DNA sample, add 100 µl DNA binding buffer)

2. Transfer mixture to a **Zymo-Spin column** that you have placed in a collection tube.

3. At this time, increase hot water bath to 65 degrees to heat elution water to final temperature.

5. Add 200 µl **Wash buffer** to the column and re-centrifuge at full speed for 30 sec. Discard the flow through. Repeat the wash step.

6. Elute DNA from column by placing the column in a large centrifuge tube then placing 15µl of 65 degree water on the column for 1 minute then centrifuging at full-speed for 30 seconds. Repeat elution in same centrifuge tube.