

How to get DNA from Wheat Germ

This is a quick and dirty DNA extraction.

Protocol

1. Obtain 2 g of wheat germ and place in a large test tube.
2. Add 20 mL of 55°C 2% NaCl solution and place your tube in the 55°C water bath. Mix regularly with a glass stirring rod for 5 minutes.
3. Add 25 drops of detergent and mix **gently** for 5 s every 30 s for 5 minutes. Try not to create foam.
4. Tilt the test tube and **SLOWLY** add 20 mL of ice cold ethyl alcohol down the side so that it forms a layer on top of the water/wheat germ/detergent mixture. Do not mix the two layers.
5. Let the test tube stand for 2 min. White, stringy DNA will begin to appear at the interface between the two layers.
6. After 2 minutes, record your observations of the DNA and then stir the mixture gently with your stirring rod. Often, more DNA will appear. Try to recover the DNA using a wood splint.

Discussion Suggestions

1. You may want to compare the amount of DNA you were able to extract to that of other groups.
2. By referring to specific steps in the protocol, you could suggest how the extraction could be improved.