Exp.18 Extraction of RNP from Yeast

Introduction:

In this experiment, nucleoprotein (RNP, RNA & protein complex) is isolated from yeast by heating the active dry yeast with dilute alkaline solution or concentrated salt solution. It involves the disruption or change permeability of the cell membrane, and then RNP is released in the solution. Centrifuge and discard the cell debris. By adjusting pH of the solution with HCl and adding ethanol, RNP is precipitated.

Reagents:

1. Yeast
2. 10% NaCl
3. Ethanol
4. Hydrochloric acid
5. pH paper

Procedure:

Weigh 1.5 g of yeast in a 100ml beaker and add 20 ml of 0.2% NaOH or 20 ml of 10% NaCl. Heat the solution for 30~40 minutes in a boiling water bath. Centrifuge and collect the solution in another centrifuge tube. After the solution is cooled, add 5 ml of ethanol and adjust to pH ~3 with HCl (using pH paper). Centrifuge and save the crude RNP pellet for next experiment.

Results：

Record your observations.

Discussions：