General Protocol for Precipitation of DNA with Sodium Acetate and Ethanol

For ethanol precipitation of DNA from solution, the solution needs to have a high salt concentration. usually, this must be added in the form of sodium acetate (Na-Ac, the best salt for this purpose) or NaCl. After the solution has been adjusted with salt, 100% ethanol is added so the final EtOH concentration is 70% and the final salt concentration is 0.3M.

Protocol

- 1. Measure volume of DNA solution. Then add appropriate quantities of 3 M Na-Acetate and 100% EtOH added so the final EtOH concentration is 70% and the final salt concentration is 0.3M.
- 2. [optional] Add 1 ul of 10mg/ml tRNA (this acts as a carrier for small amounts of DNA).
- 3. After adding the NaAc and EtOH, cap, mix briefly, and centrifuge on high for 10 min.
- 4. While visualizing the pellet on the bottom of the tube, carefully pour out the supernatant (its OK to leave a little super behind).
- 5. Wash the pellet by adding 1 ml 70 % EtOH.
- 6. If pellet comes loose at this step, then re-centrifuge for 2 min.
- 7. Discard super as before.
- 8. Remove last traces of 70 % EtOH using a drawn out glass pipette or equalivent.
- 9. Dry under vacuum dissector for 5 min.
- 10. Ready for resuspension.