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DNA concentration by precipitation in ethanol

based on protocol found at: https://www.auburn.edu/~santosr/protocols/NaAcEtOHDNAPrecip.pdf

1. Adjust the salt concentration, for example, with sodium acetate (0.3 M, pH 5.2, final concentration) or ammonium acetate (2.0–2.5 M, final concentration).

2. Add 0.6–0.7 volumes of room-temperature isopropanol to the DNA solution and mix well.

3. Centrifuge the sample immediately at 10,000–15,000 x g for 15–30 min at 4°C

4. Carefully decant the supernatant without disturbing the pellet.

5. Wash the DNA pellet by adding 1–10 ml (depending on the size of the preparation) of room-temperature 70% ethanol. This removes co-precipitated salt and replaces the isopropanol with the more volatile ethanol, making the DNA easier to re-dissolve.

6. Centrifuge at 10,000–15,000 x g for 5–15 min at 4°C

7. Repeat the washing and centrifugation steps once more.

8. Carefully decant the supernatant without disturbing the pellet.

9. Air-dry the pellet for 5–20 min (depending on the size of the pellet).

10. Re-dissolve the DNA in a suitable buffer.