Ethanol Precipitation

AIM: To purify and concentrate PCR products.

Materials required:

- 3M (pH-6.8) Sodium Acetate solution
- 100% Ethanol
- DEPC-treated autoclaved MilliQ

Procedure:

- Dilute the PCR product to 400uL using DEPC MilliQ.
- Add 40 uL of 3M sodium acetate solution to this diluted solution.
- Invert and mix the solution a few times.
- Add 1000uL of 100% Ethanol to the solution.
- Keep the solution at -80 C for at least 4 hours (ideally overnight-12 hours).
- Set the centrifuge to 10 C for 20 mins at 3000 rpm.
- Immediately take out the solution and centrifuge it.
- After a white pellet formation, separate the supernatant and the pellet. (The supernatant can again be kept at -80 C in case the required amount of pellet was not obtained.)
- Air dry the pellet for 5-10 mins.
- Then dry the pellet in a concentrator for at least 20 mins (ideally overnight-12 hours).
- Resuspend the dried pellet obtained in depc-treated autoclaved MilliQ water till the desired volume and concentration.