

DNA extraction protocol - saliva

In this simple protocol we will be using household items to extract DNA from your own saliva sample.

Materials + Tools

- 50ml falcon tubes
- Saliva
- Dish soap
- Table salt
- Contact lense solution
- Absolute / 70% ethanol
- p20 pipette and tips

Instructions

1. Spit into the falcon tube until you have about 10ml of saliva. The saliva is laden with cells, shed from your cheeks and mouth lining, which are full of DNA.
2. Add a few drops of dish soap. This will break open the cells, a process called “lysing.”
3. Add a tiny splash of contact lense cleaning solution. This will clean up some of the proteins that have spilled out of your cells alongside your DNA.
4. Add a pinch of salt. This causes the DNA to start clumping together.

5. Swirl the tube to mix the ingredients.
6. Gently fill the tube to 30ml with the high-proof alcohol, which should sit in a layer on top of the mixture.
7. Use a pipette to spool up the cloudy, snot-like material that has formed in the glass.

This is your DNA.