

DNA Isolation from Saliva

Requirements:

- Dish Liquid soap (roughly 5ml)
- Table Salt (1 Table spoon)
- Water (50 ml)
- Alcohol/ Sanitizer (10-15 ml)
- Saliva (DNA source)

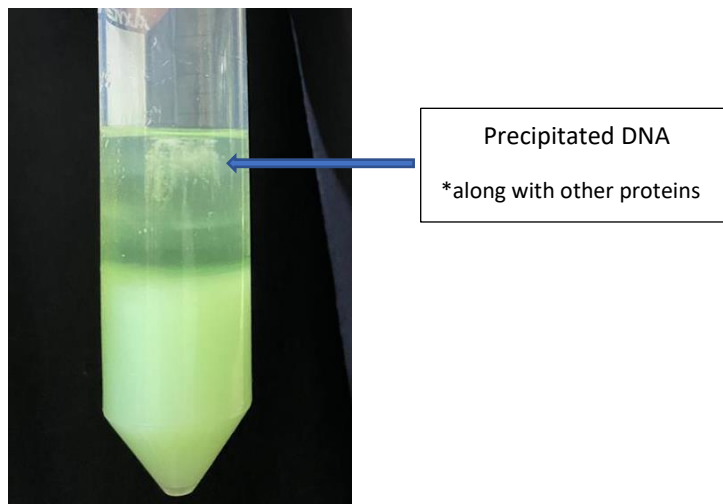
Step 1: Add 5 ml of liquid soap to the beaker containing 50 ml of water

Step 2: Add a table spoon of common salt and mix well

Step 3: Open a 15 ml centrifuge tube with 10 ml of soap-water-salt mixture and have the subject spit 2.5 ml of saliva into it. (Prior to saliva collection, ensure that the subject's mouth is free of food or other foreign substances by having the subject rinse their mouth with water and avoiding eating or drinking for 30 min before collecting the sample)

Step 4: Keep around 50 ml of alcohol/sanitizer in the freezer to chill.

Step 5: Pour the chilled alcohol into the centrifuge tube along the side. Wait for 5 min. to see the DNA threads precipitating on the top layer.



Role of each component:

- Liquid dish soap: Detergent; ruptures the cell lipid membrane to release the DNA
- Common Salt: Removes the proteins binding the DNA and aids in DNA precipitation.
- Strainer: Removes cell debris
- Alcohol: Precipitates the DNA