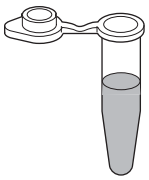
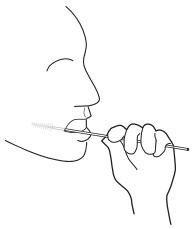
Quick Guide for DNA Extraction and Precipitation

1. Obtain for yourself a clear micro test tube containing 1 ml of lysis buffer from the foam micro tube holder at your workstation, and label it with your initials using a permanent marker.

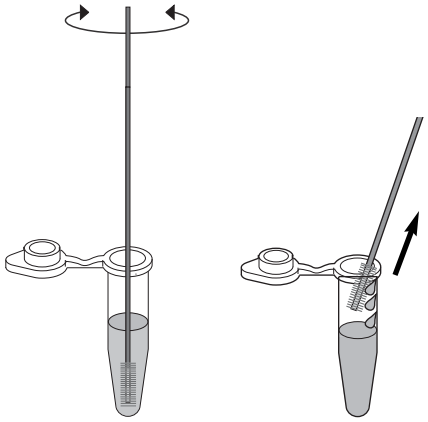


1 ml lysis buffer

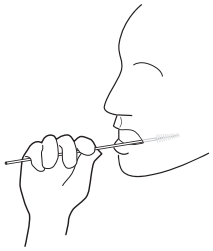
2. Gently scrape cells from the inside of your right cheek and from the space between your cheek and gum with a brush for 1 minute; try to collect as much cell material as possible.



3. Place the brush with the cheek cells into the tube containing lysis buffer. Swirl the brush around to release the cells from the brush into the buffer. Scrape the brush bristles across the top of the tube to transfer as much of the cells into the micro test tube as possible.

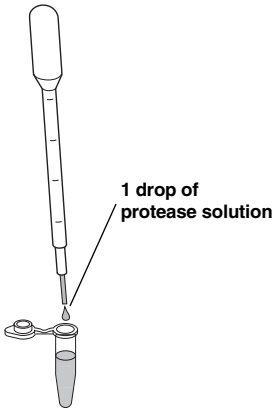


4. Using a second, clean brush, gently scrape the cells from the inside of your left cheek, in between your cheek and gum, along the roof of your mouth, and under your tongue for 1 minute; again, try to collect as much cell material as possible. Place the brush in and transfer the cells to the same tube as before.

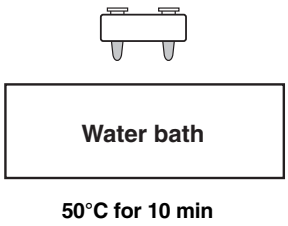


5. Cap the micro test tube and **gently** invert it 5 times to mix.

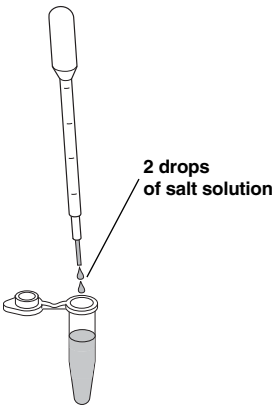
6. Using a plastic transfer pipet, add 1 drop from the tube labeled "**prot**" into the tube containing your cells. Cap the cell extract tube and invert it 5 times to mix.



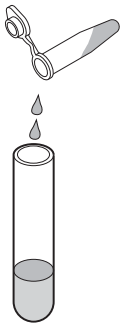
7. Place your group's micro test tubes in the foam micro test tube holder and incubate them at 50°C for 10 minutes. Remove your tubes from the water bath.



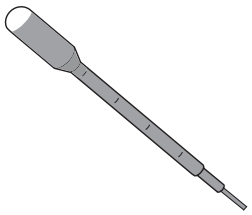
8. Using a plastic transfer pipet, add 2 drops from the tube labeled "**salt**" into the tube containing your cell extract. Cap the tube and gently invert 5 times to mix.



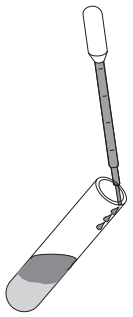
9. Label a clean 5 ml round-bottom test tube with your initials and pour the contents of your micro test tube into the round-bottom tube.



10. Obtain a plastic transfer pipet and fill it with cold alcohol.

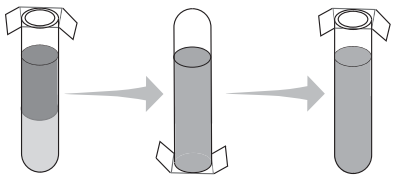


11. Tilt the round-bottom tube at a 45° angle and slowly add the alcohol, carefully letting it flow gently down the inside wall of the tube.



12. Let the tube sit upright and undisturbed for 5 minutes.

13. After 5 minutes, seal the top of the tube with a piece of Parafilm and slowly invert the tube 5 times to help the DNA, which has begun to precipitate, to aggregate.



14. With a plastic transfer pipet, carefully transfer the precipitated DNA along with approximately 750 µl to 1 ml of the alcohol solution into a small glass vial provided in the DNA necklace kit (166-2200EDU), or, if you are not going to make a DNA necklace, save your DNA in a screwcap tube provided in this kit.