



## DANAGENE SALIVA KIT

### QUICK PROTOCOL

#### Extraction from samples of 600 µl of direct saliva

#### Kit components

|                                     | Ref.0603.4        | Ref.0603.41        |
|-------------------------------------|-------------------|--------------------|
|                                     | 50<br>extractions | 160<br>extractions |
| <b>Lysis buffer</b>                 | 30 ml             | 3 x 34,5 ml        |
| <b>Protein precipitation buffer</b> | 10 ml             | 3 x 14 ml          |
| <b>Hydration buffer</b>             | 35 ml             | 3 x 37,5 ml        |

#### Equipment and reagents required and not provided

- Isopropanol.
- Ethanol 70%.
- Microtubes of 1,5 or 2 ml.
- High speed centrifuge.
- Vortex type mixer.
- Micropipette and tips.
- Water bath.

#### Sampling

Place approximately **1.5 ml of saliva** in a collection container. It is recommended not to have eaten anything during the 30 minutes prior to sampling. To do this pass the tongue with movements up-down by the walls of the cheeks, jaws and palate to collect the cells.

#### Cell Lysis

1. Place **600-800 µl of saliva** in a 1.5 ml microtube. Centrifuge for 90 seconds at 13,000-16,000 x g. Remove the supernatant with pipette without damaging the visible white cell pellet.

2. Add **600 µl of Lysis Buffer**. Resuspend with the micropipette by means of movements up and down, to dissolve the pellet of cells and to lyse it.

**VERY IMPORTANT**, resuspend completely the pellet without any white clump in the solution, otherwise the amount of DNA obtained will be small.

3. Incubate for 10 minutes. Shake the tubes gently every 2 minutes. If it is possible to incubate at 37°C, this will improve performance.

**Protein precipitation.**

1. Add **200 µl Protein Precipitation Buffer** to the cell lysate.
2. Mix vigorously with a vortex type mixer, at maximum speed for 20-30 seconds.
3. Centrifuge at 13,000-16,000 x g for 5 minutes. A precipitate will form. If floating particles are observed, re-centrifuge after incubating 5 minutes on ice.

**DNA precipitation.**

1. Transfer the supernatant containing the DNA to a 1.5 ml microtube containing **600 µl Isopropanol**.
2. Mix by inversion about 25-50 times.
3. Centrifuge at 13,000-16,000 x g for 2 minutes. The DNA will be visible as a white pellet.
4. Remove the supernatant and dry the tube briefly on absorbent paper. Add **600 µl of Ethanol 70%** to wash the DNA.
5. Centrifuge at 13,000-16,000 x g for 1 minute. Carefully remove the supernatant without touching the DNA pellet. Turn again briefly and with a micropipette and fine tip collect the last drops residual ethanol.
6. Invert the microtube into an absorbent paper and let it dry for about 5-10 minutes.

**Hydration of DNA.**

1. Add **100-750 µl of Hydration Buffer**, depending on the size of the DNA pellet, and resuspend with micropipette. It is possible that large pellets require incubation at 55°C for 1 hour in order to be able to resuspend completely them before carrying out the PCR. For very small pellets you can use **25-50 µl of Hydration Buffer**.
2. Store at 2-8°C. For long storage, store at -20°C or -80°C.

**For any further questions or queries, please contact us at [info@bioted.es](mailto:info@bioted.es)**