

8.3 Buccal Scrape

1. PURPOSE AND APPLICABILITY

The purpose of this SOP is to describe the performance of buccal scrape collections. This SOP is used for the EXPOsOMICS study.

2. DEFINITIONS

Buccal scrape:	A scrape, collected from the inside of the cheek
Eppendorf vial:	Collection vial for buccal scrape sample (conical bottom)
SOP:	Standard Operating Procedure

3. REFERENCES

4. DISCUSSION

5. RESPONSIBILITIES

1. The Coordinator is responsible for final review and approval of this SOP.
2. The local Principal Investigator is responsible for that new versions of this SOP are available for every member of the project team and that older SOP versions are collected and destroyed.
3. Members of the project team are responsible for working according to this SOP and reporting of local and temporal deviations and local changes of this SOP.
4. Erik van Nunen is responsible for the text in this SOP.

6. EQUIPMENT AND MATERIALS

All centres will provide own equipment, when it has been decided to add a buccal scrape to the biological parameters of interest.

6.1 Equipment

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6.2 Materials

- 2 Buccal scrapers (Provided by IRAS)
- 2 Eppendorf (conical bottom)vials
- Labels for Eppendorf vials
- 2" (5 cm) tall cardboard box with an 81 space divider
- Cooler with cool packs
- Gloves
- Absorbent sheets
- Paper tissues
- RNA Cell Protect (Provided by IRAS)
- Phosphate buffered saline (PBS)
- Trash bag
- Autoclave bag

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- Trash bag
 - Autoclave bag
 - Pen/pencil/black waterproof marker

6.3 Paper Materials

- BFF to report finishing sample collection.
- BLF form for arrival and handling at the university

7 PROCEDURES

Buccal scrapes are to be collected from each subject. This sample is collected by scraping the inside of the cheek with a small plastic device. One scrape is collected from each cheek and scrapes are stored in Eppendorf vials. One vial is filled with 0.5ml PBS (Left cheek) while the other is filled with 0.5ml RNA cell protect (Right cheek).

7.1 Before a PEM session

Before each PEM session, conical bottom Eppendorf vials will be prepared for the storage of Buccal Scrape samples.

1. Label the vials with Subject ID, date and BL/BR.
2. Fill the BL vial with 0.5ml PBS.
3. Fill the BR vial with 0.5ml RNA Cell Protect

7.2 During a PEM session

1. Absorbent sheets will be placed on a table to create a clean working area
2. Scrapers, vials, bags and the cardboard box will be arranged on the table in a clear order to prevent contamination of samples
3. Wear gloves
4. The subject is asked to open the mouth to collect the scrape sample
5. Toward the rear of the mouth, scrape the inside of the LEFT cheek 10 times going from top to bottom with the scrape
6. Place the pointed end of the scraper into an Eppendorf vial, filled with 0.5ml PBS
7. Break off the straight portion of the scraper
8. Close the vial and tap it so the PBS inside is agitated against the scraper

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5. Toward the rear of the mouth, scrape the inside of the LEFT cheek 10 times going from top to bottom with the scrape
 6. Place the pointed end of the scraper into an Eppendorf vial, filled with 0.5ml PBS
 7. Break off the straight portion of the scraper
 8. Close the vial and tap it, so the PBS inside is agitated against the scraper
 9. Put the sample in the cardboard box
 10. Completion of the LEFT scrape will be marked on the BFF by ticking the box

 11. Toward the rear of the mouth, scrape the inside of the RIGHT cheek 10 times going from top to bottom with the scrape
 12. Place the pointed end of the scraper into an Eppendorf vial, filled with 0.5ml RNA Cell Protect.
 13. Break off the straight portion of the scraper
 14. Close the vial and tap it, so the reagent inside is agitated against the scraper
 15. Put the sample in the cardboard box
 16. Completion of the RIGHT scrape will be marked on the BFF by ticking the box

 17. Use rubber bands to close the cardboard box and place it in the cooler (4°C)
 18. Mark the plastic box with "Store".

7.3 After a PEM session

At the centre, the cardboard box with Buccal scrape samples will be opened. LEFT and RIGHT samples will be stored in separate boxes. Subsequently, samples will be stored in -80°C. Location (Room, Freezer, Shelf) will be logged on the BLF.

8 DATA RECORDS

Collection of samples will be logged on the BFF and storage of samples will be logged on the BLF.

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