Collection Methods: SalivaBio Infant's Swab (SIS)

Approved for collection of saliva for analysis of: cortisol, alpha-amylase (sAA), chromogranin A (CgA), cotinine, C-reactive protein (CRP), Interleukin-1 beta (IL-1β), Interleukin-6 (IL-6), melatonin, secretory IgA (SIgA), testosterone and DNA.

Introductions: SalivaBio Swabs are intended for the collection of saliva samples for analysis. The SalivaBio Infant's Swab (SIS) (Item No. 5001.08), is recommended for infants under 6 months of age. The SIS may also be used for non-human saliva collection based on the size of the species and the researcher’s preference.

SalivaBio Infant’s Swab Cautions:
- Use only as directed.
- This device is packaged clean, but not sterile.
- A copy of this caution note or the instruction sheet must be distributed to each device user.
- This device is not a toy and is intended for collection of saliva.
- Adult assistance and supervision is required during use.
- Inspect device for cuts or tears. DO NOT USE if cuts or tears are present.
- When not used as directed these devices may represent a choking hazard for children and infants.
- Store out of the reach of children.

Materials Needed:
- SalivaBio Infant’s Swab (Item No. 5001.08)
- Swab Storage Tube (Item No. 5001.05)
- Bar-coded labels (Item No. 5007.00)
- 4” swab storage tube boxes (Item No. 5023.00)
- Optional: Cryovials (Item No. 5002.01-06)
- Optional: 3 cc or 5 cc syringe (Item No. 5015.02)
- Optional: Scissors

Instructions for Use: Human/Animal Participants

1. Peel back protective package and remove the SIS. Do not use swab if cuts or tears are present.
2. Securely hold one end of the SIS device and try to place the other end under the subject’s tongue. With infants or non-human subjects, it may only be possible to collect pooling saliva (often at the corners of the mouth or under the tongue). You can try to collect for the full 60-90 seconds at once by resting the swab inside the mouth, or collect in intervals by re-introducing the swab into the mouth as needed until the lower third of the swab is saturated (60-90 seconds total).

Flow rate may be difficult to estimate when collecting with this device due to its rapid absorption characteristics. See Effects of Mouth Location and Flow Rate on Salivary Analytes in the Saliva Collection Handbook.

Be sure you’ve collected enough volume. Too little volume may make it impossible to perform the test.

3. Immediately after collection, use one of the following procedures for storing the sample:
   a. If storing the swab in a Swab Storage Tube for centrifugation in lab
      1. Remove cap and insert the saturated end of the swab into the tube insert of the swab storage tube (SST).
      2. Fold over the dry end of the swab into the SST insert as well.
      3. Recap SST tightly. Note: Do no throw away any parts of the tube assembly.
b. If assessing volume in the field or using compression to remove the sample

1. Remove plunger from a 3 cc or 5 cc syringe.
2. Insert the swab into the syringe barrel, **saturated end first**.
3. Cut off the protruding dry end of the swab (or double-over the dry end and insert into syringe barrel).
4. Replace plunger into syringe and squeeze the swab to express the saliva into a cryovial.
5. Repeat collection procedure if additional volume is required.
6. Cap tube tightly. You may discard swab, unless further DNA analysis is to be expected.

**Note:** The compression method recovers slightly less saliva volume from the swab than centrifugation, but allows the volume recovered to be assessed.

4. Label the exterior of the SST **horizontally** with an identifying, bar-coded, cryo-label (*required for samples that will be sent to Salimetrics SalivaLab). **Do not use paper labels – they will fall off when frozen.**

**Sample Handling and Processing (As described in the Saliva Collection Handbook):**

- Immediately after collection, freeze samples at or below -20°C. If freezing is not possible, refrigerate immediately at 4°C and maintain at this temperature for no longer than necessary (ideally less than 2 hours) before freezing at or below -20°C (temperature of a regular household freezer).
- Samples stored for more than 4 months should be frozen at -80°C.
- Freeze-thaw cycles should be minimized for some analytes. It is critical that storage conditions are researched prior to initiation of sample collection.
- If processing samples in-house prior to freezing, centrifuge the storage tube for 15 minutes at 3000 to 3500 rpm (1500 g) to extract the saliva. You may discard swab basket and swab unless further DNA testing is expected. **Keep SST in upright position.** Recap tube and proceed with freezing.
- It is recommended that tubes be organized into storage boxes (7x7 grids, 49 tubes) before storing or shipping.

**NOTES:**

- Samples can be frozen in the swab for up to 6 months. However, we recommend samples are expressed or centrifuged to remove saliva from swab collections as soon as possible and prior to freezing at temperatures of -20°C or below in order to minimize freeze-thaw cycles.
- Investigators using saliva samples collected with swab devices for analytes other than those approved by Salimetrics do so at their own risk.