Collection Methods: SalivaBio Oral Swab (SOS)

The SOS has been validated by Salimetrics for collection of saliva for the analysis of: Cortisol, Alpha-Amylase (sAA), Cotinine, Immunoglobulin G (IgG), Immunoglobulin M (IgM), Interleukin-1 Beta (IL-1β), Osteocalcin, Secretory IgA (SIgA), Testosterone, Uric Acid, and DNA.

Introduction: SalivaBio Swabs are intended for the collection of saliva samples for analysis. The SalivaBio Oral Swab (SOS) (Item No. 5001.02, 50/pk) is recommended to help increase participant compliance for adult participants and children over 6 years of age who do not require assistance in collection. If assisted collection is required, Salimetrics recommends the SalivaBio Children’s Swab (Item no. 5001.06) or Infant’s Swab (Item no. 5001.08).

SalivaBio Oral Swab Universal Cautions:
- Use only as directed.
- Collecting saliva for analytes other than those approved by Salimetrics require validation prior to use.
- This device is clean packaged, not sterile.
- To ensure safety and proper use, a copy of this instruction sheet must be distributed to each device user.
- Store out of the reach of children.
- This device is not a toy and is intended for collection of saliva.
- Do not use this device for children under the age of (6), as the device may be a choking hazard for children.

Additional Materials Needed:
- Swab Storage Tube (SST), 17x100mm (Item No. 5001.05)
- Bar-coded labels (Item No. 5009.07)
- 4” swab storage tube boxes (Item No. 5023.00)
- Optional: 5 cc syringe (Item No. 5015.02)
- Optional: SalivaBio 2 mL cryovials (Item No. 5004.01-06)

Instructions for Use:

If estimating flow rate, see Effects of Mouth Location and Flow Rate on Salivary Analyses in the Saliva Collection Handbook (online at www.salimetrics.com).

Salivary flow rate varies by individual; collecting sufficient volume is essential to obtaining valid test results. Please refer to the Salimetrics guidelines for minimum collection volume for the analyte(s) you are testing.

1. Peel back protective package and remove the SOS.

2. Remove SOS from outer packaging and place into proper mouth location based on research question (recommended placement is under the tongue). Placing absorbent swabs in different areas of the mouth may influence both the amount of sample volume collected and the composition of the analytes in the sample. Therefore, we recommend that the SOS should remain in the same place during collection. Keep SOS in the mouth for 1-2 minutes. (If collecting from the parotid glands in the cheek, saliva flow will be low, and collection time should be extended for up to 5 minutes to ensure adequate volume.)

3. Remove SOS from mouth and immediately use one of the following procedures for storing the sample:

   a. If storing swab in swab storage tube for centrifugation in lab
      1. Remove cap and insert the swab into the tube insert (“swab basket”) of the swab storage tube (SST).
      2. Recap SST tightly. Note: Do not 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.
   3. Replace plunger into syringe and squeeze the swab to express the saliva into a cryovial.
   4. Repeat collection procedure if additional volume is required.
   5. Caps 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.

4. Label the exterior of the SST as shown with an identifying, bar-coded, cryo-label (*required for samples 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 -20°C (temperature of a regular household freezer) or below. We recommend organizing samples in 4” storage boxes (7x7 grids, 49 tubes/box).
- You may store saliva samples at -20°C (or below) in the swab or in the Swab Storage Tube for up to 4 months.
- Extract and transfer saliva samples to screw-cap cryovials and store at -80°C for long-term storage periods >4 months.
- Freeze-thaw cycles should be minimized for some analytes. Determine storage conditions prior to sample collection.
- If processing samples in-house prior to freezing, centrifuge the storage tube for 15 minutes at 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.
- All samples must be frozen at -20°C or below for a minimum of 2 hours, thawed, and centrifuged prior to laboratory testing.

**How to Reference this SalivaBio Device in Your Research (Recommended)**

“Saliva samples were collected using the SalivaBio Oral Swab (exclusively from Salimetrics, State College, PA), a synthetic swab specifically designed to improve volume collection and increase participant compliance and validated for use with salivary [Analytes].”

**NOTES:**

- The measurement of some analytes is influenced by saliva flow or production rate. See *Effects of Mouth Location and Flow Rate on Salivary Analytes* in the Saliva Collection Handbook (online at [www.salimetrics.com](http://www.salimetrics.com)) for more information.

References available online at: [http://salimetrics.com/collection-system/adult-oral-swab](http://salimetrics.com/collection-system/adult-oral-swab)