

## Guidelines for Family and/or Donor Reference Collection Kit Components and Oral Swab Collection Instructions

To obtain a properly collected and labeled sample, it is preferable to use a tamper-evident, presealed oral swab collection kit. Some laboratories may prefer to have the swabs air-dry for 15 minutes to an hour prior to placing the oral swab in the swab envelope. Although the process of air-drying the swabs may lead to a more pristine sample, the process of air-drying is risky and may inadvertently lead to a sample mixup if more than one person's sample is collected at a time. The laboratory may also want to incorporate some type of notification system in which the collection location calls or faxes the DNA laboratory when the sample has been collected, alerting the DNA laboratory that the sample is on the way. A tamper-evident, presealed oral swab collection kit may contain:

**Collection instructions** (See sample Oral Swab Collection Instructions below)

**Collection form for family reference sample** (See Sample Family and/or Donor Reference Collection Form, appendix C)

**Form describing the family relationship** (See Sample Family Tree form, appendix D)

**Pair of gloves** (preferably one-size-fits-all Nitrile gloves)

**Sterile, cotton-tipped swabs (2–6)**

If the collection is performed correctly on a healthy individual, two swabs are sufficient to get adequate amounts of DNA for a short tandem repeat (STR) analysis. If extended testing may be required, it is preferable to collect six swabs.

**Fastener (optional)**

A small rubber band or twist-tie may be included to bind together all of the swabs from one individual prior to placing them in the swab envelope. Alternatively, a label may be included to secure and label the swabs.

**Swab envelope**

Once the swabs have been collected, they should be placed in an envelope that can be uniquely identified with the donor's information.

**Tamper-evident, sealable bag, containing desiccant packet**

If mass collections are to be performed, inadvertent sample switches may occur if the swabs are allowed to air-dry in the open; therefore, a desiccant can be used to help keep the moist swab from molding. If a Ziploc bag is used, tamper-evident police-evidence seals can be placed on the bag.

**Mailing envelope**

A preprinted mailing envelope with an appropriate prepaid shipping label will help ensure that the swabs are delivered to the correct location. Make sure the shipping carrier services the area where the sample will be collected. Different air bills and customs documents may be needed if samples will be shipped from outside the United States.

### Oral Swab Collection Instructions

To avoid sample mixups, identification, collection, and sample sealing should be performed for *one* individual at a time. Also, it would be advisable to:

- Have a trained individual interview the family member and complete a family tree.
- Wear gloves while collecting the sample, and change gloves before collecting from the next individual.
- Collect samples from one individual at a time.
- Verify the identity of the individual whose sample is being collected and confirm that the mouth is free of tobacco products, gum, food, etc., before collecting the oral swab. If necessary, have the individual rinse his or her mouth with water prior to collection.

- Have the donor fill out a Family and/or Donor Reference Collection form.
- Open the swab packages provided, being careful to not handle the cotton tip of the swabs.
- Remove one swab and collect the specimen by rubbing the swab vigorously and thoroughly on the inside surfaces of the cheeks and gums. Rub the swab up and down and back and forth about 10 times, while slowly turning the swab, so that all sides of the swab are in contact with the side of the cheek.
- Place the swab in the envelope provided. Do not place the swab back into the original packaging. Repeat the process with the remaining swabs.
- Identify the swab envelope with the date, the donor's name, and the collector's name. Have the donor sign the envelope to verify the information.
- Complete the collection information on a Family and/or Donor Reference Collection form, and verify that the donor completed the requested information.
- Seal the swab envelope. Place the swab envelope and completed Family and/or Donor Reference Collection form in the plastic bag with the desiccant, and place in shipping envelope. Maintain the sample in a cool, dry environment until shipment. Do not store under extreme hot or cold conditions.