

Canine DNA Testing at the University of Missouri

SAMPLE HANDLING – Brush Buccal Swabs

- In the sample collection kit there should be **two sterile swabs** for each individual to be sampled.
- If sampling multiple dogs, sample them one at a time and complete the process for each to avoid any cross contamination or mislabeling of DNA samples.
- A second person to handle the dog while you collect the sample will be very useful and reduce possibility of contamination.
- **Dogs being swabbed should not have had anything to eat or drink for about an hour prior to collecting the sample.** With adult dogs, pick up chew bones, rawhides, or any other toys and keep them away from the dog for at least an hour prior to sampling. If testing baby puppies, isolate each puppy from the mother, littermates and any shared toys for 1 hour prior to swabbing. Puppies should not have nursed or eaten for 1 hour prior to collecting the sample.

The goal is to collect cells from the inside lining of the dog's cheek and gums using the provided swabs. The key to obtaining a good sample is getting cheek cells (not saliva/drool) on the brush.

- 1) Label two swab sleeves by affixing the dog specific bar code labels provided on the order confirmation sheet to the swab sleeves.
- 2) Partially open the swab sleeve where the label says "PEEL AT ARROW". Only peel the sleeve back enough to remove the swab as you will be placing the swab back in the sleeve when mailing. It is VERY IMPORTANT that you do not touch the brush end to anything except the mouth of the individual being sampled.



- 3) Place the bristle head of the swab between the dog's gums and cheek and press lightly on the outside of the cheek while rubbing or rotating the brush back and forth for 15 seconds (see picture above). Your goal is to collect cells from the inside of the cheek.
- 4) After collecting the sample, wave swabs in the air for several seconds to air dry before inserting them back brush end first into the labeled swab sleeve.
- 5) Repeat steps 2-4 with a second brush for each dog.

Shipping – The swabs can be sent by regular mail. A return address label to the U of MO Canine Genetics Lab is provided on the order form.

RETURN bar-coded swab sleeves and test order forms to:

University of Missouri
Canine Genetics Lab
320 Connaway Hall
Columbia, MO 65211

If you need clarification, or have any questions about any of these procedures, please contact the OFA at ofa@ofa.org or by phone at (573) 442-0418..

Thank you!