

# Biopsy Instructions For Veterinarians

The following instructions are for veterinarians who need to perform a tissue biopsy on a client's dog for gene banking purposes. The tissue biopsy can be sent to any certified gene banking company, although it is recommended to use MiniTube for the service. It is recommended that you contact the gene banking company PRIOR to performing the tissue biopsy so the company can instruct you on the proper protocols for obtaining and shipping tissue samples. The instructions below are general.

## **Sudden Death or Euthanasia**

If the animal dies suddenly, refrigerate but DO NOT FREEZE the animal until you perform the biopsy procedure. If you must euthanize the animal, perform the biopsy procedure and store each biopsy sample in a separate sterile vial containing sterile saline with a 1% antibiotic solution (Pen-Strep or Gentamicin but not Baytril). Blood tubes without anticoagulant are appropriate vials. Store vials in the refrigerator but DO NOT FREEZE.

Note: Tissue samples must be received by the gene banking lab no later than 5 days post-mortem.

## **1. Pet Preparation**

Use appropriate anesthesia and/or sedation as required. Either general or local anesthetics are permissible. Only use general anesthesia if the pet's health will not be compromised.

## **2. Aseptic Preparation of Biopsy Site**

The biopsy area must be shaved and cleansed with a series of betadine, chlorhexidine and alcohol scrubs. The area should be covered with a sterile drape if applicable.

## **3. Tools and Technique**

**LIVE ANIMALS:** Use a 6mm biopsy tool for all samples. Please rinse the tool in alcohol between each biopsy. The instrument is rotated on the surface of the skin until it cuts through all the layers, including the epidermis, dermis, and the most superficial parts of the subcutis. If biopsy remains in the tool, remove with sterile forceps. If biopsy fails to separate from the subcutis, remove with sterile forceps and scalpel. Appropriate suture material should be used to close each biopsy site.

**EUTHANIZED ANIMALS:** A sterile scalpel and forceps are required. Cut through all the layers including the epidermis, dermis, and the most superficial parts of the subcutis. Remove (1.0cm X 3.0cm) tissue samples with sterile forceps.

## **4. Biopsy Procedure Guidelines**

You will need 4 refrigerated vials. Remove vials from the refrigerator no more than one half hour before surgery. You will also need one bag of Parafilm Sealing Tape strips for use after the samples are placed into the vials.

Vials 1 & 2 (Required) – are for two (2) Oral Mucosae samples. These should be obtained from inside the upper lip in standard aseptic fashion using the 6mm punch biopsy tool. One biopsy should be placed in each vial. The biopsy site should be closed using appropriate suture materials.

Vials 3 & 4 (Required) – are for four (4) Skin Samples. These should be obtained from the ventral abdomen in standard aseptic fashion using the 6mm punch biopsy tool. Two biopsies should be placed in each vial. The biopsy site should be closed using appropriate suture materials.

## **5. Biopsy Handling**

- a) Always use sterile techniques within a sterile operating field. Sterility must be maintained for all vials.
- b) VERY IMPORTANT: Be sure to place the sterile biopsy samples into the corresponding vials and label the vials appropriately.
- c) Using a sterile technique, close each vial after each biopsy sample is placed inside. Seal each vial with a Parafilm Sealing Strip.
- d) Place the vials into a refrigerator maintained between 2° and 8°C (35° to 45° F) until they are ready to ship.

## **6. Ship the Biopsy Samples**

- a) Get a small insulated container. Place frozen gel packs or standard ice in a sealed plastic bag into the container. The container should contain enough gel packs or ice to keep it cool for at least 48 hours.
- b) Wrap the biopsy vials with bubble wrap to prevent them contacting the ice and freezing. Place the wrapped vials into the container.
- c) Be sure to include the necessary information about the client and the tissue sample in the container using a sealed waterproof envelope. Seal the container firmly.
- e) Ship the sample using FedEx Priority Overnight Shipping service. DO NOT ship any tissue samples on a Friday as most labs are closed for the weekend. If necessary, keep the tissue sample refrigerated until Monday.