

## Genetic Preservation Instructions Deceased Livestock

### General Information

Time is of the essence in a post-mortem situation. If the animal/tissue has been kept under optimal conditions post mortem, cool (approximately 4°C), **not frozen**, then the maximum length of time we can accept the biopsy samples is 5 days. Storage at higher temperatures will decrease the chance of successful preservation and should be avoided. Keep in mind that each day the animal has been deceased minimizes the chance of a successful preservation. Please be aware the best way to assure a successful preservation is to have your animal biopsied while it is alive. These instructions are to be used for obtaining tissue for genetic preservation from deceased animals. Tissue samples received will be used to establish cell cultures, and the resulting cells will be harvested and stored in liquid nitrogen

### Sample Types

Recommended tissue types for gene banking include: flank skin, muscle, and ear. (EAR IS PREFERRED).

### Labeling Instructions

1. Using a marker, clearly label one container or Ziploc bag for each sample with the following:
  - a. Sample type (ear, flank skin, muscle)
  - b. Collection date
  - c. Date of death
  - d. Animal ID (ear tag, brand, and/or tattoo)

### Deceased Animal Sample Collection Protocol

1. Thoroughly wash hands to avoid further contamination of ear.
2. Cut off the ear of the deceased animal with a clean knife or scalpel (You can clean knife/scalpel with rubbing alcohol or ethanol).
3. Put one ear in a Ziploc bag and label Ziploc bag as stated above (*Labeling Instructions*).
4. Place in refrigerator until ready to ship. **DO NOT FREEZE!** Freezing the ear is detrimental to cell growth.
  - a **Cut off the second ear and store in refrigerator as a back-up.**



### **Shipment Procedure for Tissue Samples**

1. Place the ice packs in the bottom of a Styrofoam box.
2. Wrap the samples in newspaper or bubble wrap, so they will not come in direct contact with the ice.
3. Place the samples on top of the ice packs.
4. Place any contracts/payments in a Ziploc bag and include in the box.
5. Seal the box, and immediately send samples

**When shipping animal tissue, ship overnight, earliest delivery possible.**

**For Fedex shipping use: FedEx First Overnight**

**For UPS shipping use: UPS Next Day Air Early**

**If you need a label created, please contact for assistance:**

**Shelby Franken: (630) 870-2911**

**Diane Broek: (712) 441-3193**

6. Ship to:

**Trans Ova Genetics Clone Lab  
Shelby Franken  
3483 US 75 Ave  
Hull, Iowa  
51239**

**Please call or text Shelby Franken (630) 870-2911 to notify you are sending in tissue to the lab.**

### **Hair Card (DNA Analysis)**

After an animal is cloned from your animal's cells, DNA analysis will be performed to verify the identity of the animal. In order to store your animal's DNA for this purpose, DNA needs to be collected using a DNA hair card. You need to collect samples as soon as you can.

**DNA Card Protocol (hair):**

1. Pull 20-30 pieces of hair from the tail of the animal. Make sure the follicle bulbs are intact.
2. Peel back the plastic cover on the inside of the hair card.
3. Insert the follicle end of the hairs and seal the plastic cover.
4. Trim the hair



5. Date and label the back of the hair card with the animal's name.
6. The animal's owner and the person collecting the blood sample must sign and print their name on the card.
7. Enclose the hair card in the Ziploc bag, **one per bag**, and place them in the return shipment along with the biopsy samples

**\*\*This is required on all animals. This will later be used to verify DNA analysis on cloned animals. This MUST BE SIGNED BY THE OWNER OF THE ANIMAL and the person collecting samples.**

**\*\*\*\*Please complete TWO cards.**

**If you do not have hair cards on hand to send in with the animal tissue, please remove 20-30 hairs (tail hairs) and place in a Ziploc bag. This can be included in the box with the tissue.**