



DNA Instructions

All sires (AI* or Natural) must have a DNA profile on file at the Canadian Hereford Association, in order that calves may be eligible for registration.

All ET calves must be DNA parentage verified, before registration.

*All newly permitted AI Sires & Donor Dams must have a higher density genotype on file (currently the GGP-50K test). These tests will identify the genomics of those animals more prolific in the population to keep the development of our genomic evaluation as accurate as possible.

All animals submitted for DNA testing will also be tested for Hypotrichosis, Dilutor and Idiopathic Epilepsy abnormalities with results for registered animals published on the Canadian Hereford Association website.

Log into the CHA's online system with your user name & password, in order to obtain pre-printed applications (which must accompany the hair). Go to Requests/DNA Applications and follow the prompts. If you don't have online access, please contact the CHA office with a list of your bulls (names/registration #s &/or tattoos) and reason for testing.

Print the DNA application and send along with the hair sample to the lab address on the application.

Guidelines for PULLING hair:

COLLECT HAIR FROM THE TIP OF THE TAIL (SWITCH). THE ROOT ENDS CONTAIN THE DNA. SAMPLES ARE TO BE PULLED NOT CLIPPED.

1. **Pull (do not cut)** hair samples from the tail switch. The hair must be **CLEAN** (free of fecal matter) and **DRY**. Dirty samples will not be processed. Contamination will make the sample unfit for testing.

(Tip: Pull the hair evenly and directly away from the tail so that the hair does not break. Wrap approximately 5 to 10 strands of hair around a finger, about 2 inches away from the skin, and give a sharp pull. Inspect the hair to ensure that the follicles are attached. Hair strands without follicles do not contain DNA and cannot be tested.)

2. Repeat until you have obtained approximately **40 to 50 hair roots** (min 80 hairs for higher density tests).

3. Place all of the hair roots at one end with the long strands pointing straight down. Secure the hairs together with adhesive tape wrapped approximately 1 inch from the follicles.

Place the sample in the labeled envelope and immediately seal to minimize contamination. Hair from only one animal is to be placed in each envelope.

4. If doing more than one animal, **WASH HANDS** before starting on the next animal or use a clean pair of surgical gloves. This will reduce the risk of cross-contamination of the samples. Repeat Steps 1 to 3 for each animal.

5. **Place the preprinted application form and identified hair sample envelope in a larger envelope and send both to the lab (address on the application).** If you have several samples to send, put the individual envelopes into one larger one for mailing.

Storage: Samples store indefinitely in paper envelopes, clearly identified, at room temperature in a dry location away from sunlight (i.e. filing cabinet).

Note: If you don't already have hair sample envelope(s), any plain paper envelope will do, as long as it is clearly identified with:

- Breed, and at least two of the following:
- Complete Tattoo
- Registration/Ident #
- Animal Name

Fees are payable to the CHA and will be invoiced when DNA applications are requested. See current Fee Schedule.

We strongly recommend that if in the future, there is a possibility that semen will be drawn, that hair samples also be collected on both the sire and dam for parentage qualification (requirement for A.I. Sire Permitting bulls).