

Member Service | DNA Tips and Tricks

by Laura Loschke

DNA testing is such a vital and important component in the beef industry. DNA testing is important for many reasons, but also remember the American Hereford Association (AHA) requires DNA testing on certain animals. Those cases include any sire born after Jan. 1, 2011, from which calves will be registered, as well as any dams being flushed and having embryo transfer calves registered to them. The AHA allows several different types of samples to be used for testing. To ensure you are using the best practices when obtaining your DNA samples and mailing them, follow these tips below for each sample type.



Hair

When utilizing the hair sample method, collect the hair from the tail switch of the animal. Be sure to pull the hair sample. Do not cut it. You will need to collect 80 to 100 hairs. This may seem like a lot, but hair is easily broken, may not have a good follicle on it or could be contaminated. To make sure the lab can get a result, it is best to send 80 to 100 hairs.

Try to make sure the hair is clean and not contaminated with manure, mud, bodily fluids, etc. It is best to wait until the animal is at least weaning age before taking the sample. Hair samples taken from young calves generally do not have a lot of follicles and are hard to get a result on.



Blood card

Blood cards can be purchased from the AHA for \$.50 a piece, with a minimum order of 10. Blood can be drawn by any method deemed desirable. Be sure to fill the blotting paper section of the

DNA test prices:

- **Genomic profile: \$42**
- **Full package** (Genomic profile plus horned/polled test): **\$58**
- **Add on horned/polled test: \$30**
- **TSU credit: \$4**

blood card with blood and to saturate just enough to fill the circle but not enough to make the card soggy. Do not over saturate the blood card, as this oversaturation could cause a “bad sample” result from the lab.

Insert the blood card lid into the top slit so there is room for air to get in. Leave the card in a clean area to dry at room temperature. Do not use a heating source for drying. Once the card is dry, open the lid and insert it into the bottom slit for storage or shipping. Blood card samples can be collected at any age, so these are a better option than hair if you are needing to test a young calf.



Semen straw

Semen straws can be used as a DNA sample for bulls. They do not need to be shipped in anything refrigerated, and they can be room temperature. However, semen straws break easily, so when shipping them, be sure to put the straw into something protective.

An easy way to keep them from getting broken is to use an ink pen. Simply pop the top off of an ink pen, pull the ink out, then slide the semen straw down into the pen. The hard plastic of the pen provides protection for the straw in the mail. It is also best to use a padded envelope to send samples, even if you have put the straw into a pen or some other protective casing.



Tissue sample units

Tissue sample units (TSUs) are the latest form of samples to hit the market. They are a great way to take a sample but, like all samples, are not fail proof. In order to collect a tissue sample, you will need to order the proper equipment — tissue sample tubes and a tissue sampling applicator (gun). You can order these products directly from AllFlex or through the AHA by filling out the order form

found on the website and emailing it to eartags@hereford.org.

Again, tissue samples are great for obtaining samples on younger calves because they can be collected at any age. However, the sample should not be taken immediately after birth. The calf could still have fluids on it that would contaminate the sample. Give the calf at least a few hours to “dry off.” When collecting a tissue sample, be sure to wipe the ear clean, but that is it. Do not use any cleaning products to clean the ear; these could contaminate the sample as well. Simply use a dry cloth or paper towel to wipe the ear. Try to collect the sample from a portion of the ear that doesn’t have a tattoo. The tattoo ink could cause the sample to be contaminated and then fail testing. Be sure the white cap is pressed down firmly on the tube, ensuring the sample of liquid cannot escape.

When shipping TSUs, like semen straws, it is important to protect them properly. They should not be sent in a regular envelope as they puncture the envelope and then fall out, showing up at the lab with a submission form but no sample. Be sure to send them in a padded envelope or some other form of protective casing.

As always, all samples should be sent with the corresponding DNA submission form for the specific animal. This form should be obtained from the AHA before sending the samples into the lab. DNA requests can be made online through MyHerd or by calling or emailing the AHA Customer Service department.

Regarding DNA sample processing, remember the AHA does weekly evaluations, so the GE-EPDs can change frequently. Therefore, they are no longer printed on the DNA results statement. However, the GE-EPDs can be found online through MyHerd or the EPD/Animal Search function. Please keep in mind GE-EPDs will not appear until two weeks after the DNA results are received at the AHA. For example, if a DNA result is received at the AHA on Oct. 1, the GE-EPDs will not show until Oct. 14.

Having trouble navigating through MyHerd? Visit Hereford.org/Member-Services to view more than 20 tutorials showing the ins and outs of MyHerd or contact AHA Customer Service at 816-842-3757. To sign up for MyHerd, email your member number to myherd@hereford.org. **HW**

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