# **BEST PRACTICES FOR DNA SAMPLE COLLECTION**

Collecting good samples is crucial for receiving reliable test results. Accurate collection will reduce the number of samples that fail in the lab due to improper quantity and/or quality of DNA. Below are some tips and examples of good and bad samples to help ensure proper collection.

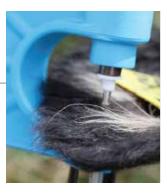
# **TISSUE – TAKING AN EAR NOTCH SAMPLE**

To take a usable tissue sample, it's important that a fairly large amount of nucleated cells is accurately collected, stored and shipped. Here are some tips for taking a good sample:

- Prepare the Allflex<sup>®</sup> tissue sampling applicator by loading a single-use Tissue Sampling Unit (TSU) and place over the ear
- Extract your sample about an inch from the edge of the ear, avoiding veins, ridges and the ID tag
- Try to complete the extraction quickly in one fluid motion to avoid damage to the sample
- Release the handles and carefully remove the TSU tube from the applicator
- Make sure a tissue sample is clearly visible inside the tube and the green plug is visible at the bottom
- Record information and place samples into a resealable plastic bag
- Samples must be stored at room temperature. Keep out of direct sunlight, as UV rays will cause damage
- Mail along with a completed order form, via regular or express mail

# **REASONS TISSUE SAMPLES FAIL:**

- The sample is dry with no buffer
- There's no tissue within the chamber
- Foreign material (ink from tattoos, cartilage, etc.) is present





GOOD SAMPLE



**BAD SAMPLE** 



BAD SAMPLE





## **BLOOD SAMPLE**

A good blood sample can be gathered with just two or three heavy drops per blood card square. Follow the tips below to ensure that your sample is properly collected:

- To avoid contamination, wash hands or use clean gloves and a new needle, syringe or pin prick device for each animal
- Verify the animal's tattoo or tag number and record it on the blood card
- Prick a vein in the animal's ear, and as blood forms touch the card within the two outlined squares to fill the space
- Bend the top flap of the card so that it's in an open position as the blood dries. Do not expose it to direct sunlight or allow it to touch other samples
- Once completely dry, rubber band 12 closed blood cards together and place in a resealable plastic bag
- · Mail along with a completed order form, via regular or express mail

## **REASONS BLOOD SAMPLES FAIL:**

- There's too little blood collected
- The sample contains clots or mold
- It has been wetted, making it poor quality
- Sample is contaminated with feces

#### **GOOD SAMPLE**



BAD SAMPLE



**BAD SAMPLE** 



## HAIR SAMPLE

To collect a good hair sample, it's imperative that you gather the hair roots. Here are tips for gathering a usable sample of hair:

- Properly restrain the animal and wash hands or use clean gloves
- Verify the animal's tattoo or tag number and record it on the hair sample collector
- Pull a pencil-thickness tuft of hair from the animal's tail switch, making sure hair roots are attached (20 25 roots)
- Open the sample collector completely, peel off the backing paper and press the sticky plastic side down on top of the hair roots, making sure the edges are sealed around the collector and all hair roots are covered
- Trim the excess hair to the edge of the sample collector
- Bundle packages of 12 dry collectors together and place within a resealable plastic bag
- Mail along with a completed order form, via regular or express mail

## **REASONS HAIR SAMPLES FAIL:**

- Foreign material (feces, etc.) is present
- There are too few hair roots collected
- The sample is too dense

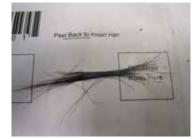
#### **GOOD SAMPLE**



#### BAD SAMPLE



#### **BAD SAMPLE**



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## **ZOETIS GENETICS**

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