

## **DNA SAMPLE COLLECTION INSTRUCTIONS**

2025

Market livestock DNA will be collected via hair follicles. Nose prints and blood samples will no longer be accepted. Questions - Call/email Rhiannon Birdwell, Competitive Entry Supervisor 660.530.5616 / Rhiannon.Birdwell@mda.mo.gov

## Instructions for pulling hair and placing in envelope:

- Pull hair with root follicles attached.
- Hair should be dry.
- If hair has excess dirt and debris, please brush out if possible.
- Do not cut the hair, the roots contain the DNA for testing.
- Use fingers or pliers to grasp approximately 8-10 hairs close to the skin and pull.
- Repeat until you have approximately 20-30 hairs with root follicles attached.
- Place 20-30 hairs with root follicles attached in a regular #10 envelope. Seal envelope.
- Clean hands and/or pliers before sampling another animal.

**Labeling envelope:** Before labeling, please verify that the ID of the animal matches the ID label on the hair sample envelope. Envelope should include the following:

- Exhibitor name
- Exhibitor address
- County of residence
- FFA Chapter or 4-H County
- Animal ID (Registration ear notch, NUES tag\*swine only\*,Registration tattoo, AIN/RFID tag) Entries without the proper animal identifications will be deemed ineligible.

## **DNA Sample Deadlines:**

Market Steers and Heifers: postmarked by March 15, 2025 Market Barrows: postmarked by May 15, 2025

Market Lambs and Wether Goats: postmarked by June 15, 2025
Agriculture Teachers or Extension Agents must provide a signature to certify that the hair sample was taken from the entered animal in their presence and that the animal entered is owned by the exhibitor. The DNA sample and data collection form must be returned to the Missouri State Fair by the Agriculture Instructor or Extension Agent and sent to:

Missouri State Fair Entry Department 2503 W. 16th Street Sedalia, MO 65301

DNA submitted to the Missouri State Fair on all junior market animals become the property of the Missouri State Fair. Exhibitors relinquish any claim to said DNA samples when submitted as proof of ownership. DNA samples are stored in a secure environment at the Missouri State Fair and are destroyed in due time following the show. These samples will never be made available for cloning or any like procedure. In all market animals at the Missouri State Fair, any DNA samples that have been collected prior to the Sale of Champions Auction (with the exception of the DNA samples submitted to the Missouri State Fair as proof of ownership as stated above) will be considered to be the property of the exhibitor to use. Exhibitors will not be allowed to use at their discretion to collect any samples after the transfer of ownership via the "fall of the hammer" at the Sale of Champions Auction unless agreed upon in writing between the buyer and the seller.

DNA samples will be tested by UC Davis Veterinary Genetics Laboratory, recognized as a pioneer and expert in DNA-based animal testing. https://vgl.ucdavis.edu/

## CATTLE: Switch of tail, poll or neck



GOAT: Coarse hair from hoof, neck or tail area



SWINE: Coarse hair from body, tail area, between toes or inside ear



SHEEP: Coarse hair from hoof or body area

