Collecting Hair for Livestock Show Drug Testing



The collection of hair samples should be undertaken by a competent individual within a secure, contamination-free facility. Hair is a strong, stable tissue that is simple to collect, transport, and store. Data suggest hair is as effective a matrix as retinal tissue for detecting beta-adrenergic agonist drugs (i.e. clenbuterol, zilpaterol, ractopamine and albuterol).

Please note that hair testing is a targeted analysis. Urine and/or serum should be submitted for comprehensive drug testing.

Sample Collection

Hair collection should be performed by individuals familiar with the process. Care should be taken to avoid the potential for cross-contamination and to ensure that hair samples are dry before collection. Gloves should be worn at all times and replaced between collections of each animal.

Collection Supplies

- TVMDL submission form or chain of custody form
- Disposable gloves
- Clippers or scissors
- Sealable bag or container
- Security tape
- Alcohol wipes or equivalent
- Select the appropriate location for sample collection. Hair from the pastern, fetlock, or tail is recommended. Note: Hair may be collected from multiple locations and combined to ensure sufficient sample size.
- 2. The sampled hair must be clean of debris and dry (do not sample wet hair).
- 3. Clean clippers or scissors with a disinfectant wipe prior to use, between each animal, and after the final collection.
- 4. Wearing new, clean disposable gloves, cut the hair as close to the skin as possible using clippers or scissors.
- 5. Collect enough hair such that the total amount when bunched is approximately 4 cm in diameter (i.e. the thickness of fat Sharpie marker).
- 6. Place the hair in a sealable bag or container and seal the bag or container with security tape.
- 7. Label the bag or container with the animal ID.
- 8. If collecting a 'B sample' repeat the steps above and store the 'B sample' in a separate sealable bag or container, labeled accordingly.
- 9. Using a TVMDL submittal form or chain of custody form, indicate the animal species, animal ID and "Drug Screen Beta Agonists in Hair (1021)" as the test request.





Samples should be stored at room temperature and protected from direct light.

For more information on submitting hair for livestock show drug testing visit tvmdl.tamu.edu.