

Laboratories of Animal Breeding & Genetics

Instructions for Sample Collection and Dispatching for DNA Testing for Breed Purity Test

PURE BREED TESTING FACILITY

FOR

CHOLISTANI, RED SINDHI & SAHIWAL CATTLE

Technical Brief:

Technique used: PCR-AFLP

Report time: 3 weeks

Samples required: Hair, Semen, and Blood

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Instructions shipping blood samples

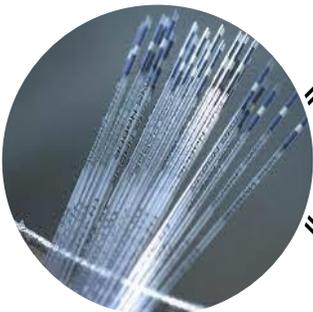
Jugular bleeding 1. Restrain cow with the head elevated and the jugular groove exposed. 2. Raise the jugular vein by placing pressure at the base of the jugular groove. 3. Pass the needle through the skin and into the vein by a firm thrust directed at an angle of 20° to the skin surface. 4. Withdraw the blood sample. **Tail Bleeding** 1. Restraint should prevent the cow from moving away during the procedure. 2. Raise the tail vertically with one hand until it is horizontal with the ground. 3. Approximately 500 mm from the base of the tail, locate the groove lying in the ventral midline of the tail. 4. Midway along the body of a coccygeal vertebra, insert the needle perpendicularly to the surface of the skin to a depth of a few millimeters. 5. Withdraw blood sample. 6. Apply pressure to the venipuncture site after withdrawal of the needle until the bleeding stops.

Once blood is collected, place the needle into a sharps container. Open red-top and purple top vacutainer tubes. Place approximately 5cc in each tube, then discard the syringe into a biohazard container. Invert each tube several times to mix. ship the sample along with data form to LABG immediately preferably at 4 °C.



Instructions shipping hair samples

1. Pull hair samples above the tail switch. 2. Do not cut the hair. The hair root contains the material needed for DNA testing. 3. Pull 20-25 hairs evenly and directly from the tail so the hair does not break. 4. The switch must be dry and brushed clean of all debris. 4. The lab suggests wrapping the hair around a pencil and then pulling. 5. Place the hair in a empty and dry pencil case. Keep the hair together with the roots. 5. Each sample has an individual packing for mailing. If you have several to mail, put each sample in its individual envelope and then mail all the envelopes in one big envelope to save on postage. The address is located on the bottom of the form. Note: It is important to only include hair from one animal in each kit. The lab cannot detect cross contamination of samples.



Instructions shipping semen samples

1. Send at least one semen straw per animal. If you would like to reduce the chances of failure in DNA testing and have access to two straws of semen per animal, send two straws in for insurance purposes. Sending only one straw significantly reduces the chances of DNA extraction for testing and may result in failure to determine a genotype. 2. Remove the straws of semen from the tank and make sure they are properly marked with the animal's registration number or herd prefix and tattoo. 3. Package the semen in a box or old ballpoint pen with protective wrapping to prevent breakage. Semen does not need to be shipped in liquid nitrogen, but a refrigerant ice pack should be included. Mark the package: Fragile, Rush, Perishable and send directly to GeneSeek. Samples should be sent overnight to arrive on a business day. Please send Cattle Testing Submission Form to the lab with the semen sample.

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SHIPMENT FORM

Customers Information:

Name: ----- Company: ----- Address: -----

Post Code: ----- Mobile: ----- Date: ----- Email: -----

Member Breed Society (Please Specify): ----- Breed: -----

Samples information:

S No.	Animal ID	Sex	Date of Birth	Breed	Sire ID & Breed	Dam ID & Breed
1.						
2.						
3.						
4.						
5.						