RED ANGUS
RANCH TESTED. RANCHER TRUSTED.

Please review these points prior to collecting samples to help avoid any issues that could cause unnecessary sample failure.
Once the samples have been collected, the Instructions Tab will help you complete the DNA Order form.
If DNA kits are needed, please contact the RAAA office at (940)387-3502 ext. 8 or email dna@redangus.org.

Hair Card

- The usable DNA is located in the hair follicle or root/bulb.
- Collect hair sample from the middle of the animal's tail switch (end of tail).
- A minimum of 20 - 30 visible follicles are needed for each sample.
- Hair is not recommended on calves as a minimum of 40 - 50 follicles are needed for each sample.
- Hair must be clean of feces, mud, etc. If necessary remove foreign matter from tail prior to collecting the sample.
- Collected sample must be dry. Wet samples deteriorate quickly and have a higher probability of failing.
- Place follicle end of hair between the films on the hair card as soon as it is collected. Do not pu sample in Ziplock baggie.
- MUST be placed on a hair card. Align follicles under clear top film and stick down film to the card to secure sample.
- Trim Excess hair around the outside of the card. Make sure you DO NOT trim off follicles.
- Keep carded hair sample out of direct sunlight, extreme temperatures, dust and moisture.
- Hair samples can be shipped in a standard shipping box or padded envelope.
- Subject to $5 lab processing fee.

Blood Card

- Ideal sample collection locations include the ear, the underside of the tail or drawing blood and placing on card later.
- Use a new sterile needle for each animal to prevent contamination. Do not simply wash the needle between animals.
- Ensure that the location of the sample collection is clean. Wipe area with a dry paper towel if necessary
- Fill the entire pre-printed circle on the card with blood. Be sure to not oversaturate or flood the card.
- Prevent direct contact between wet cards as cross contamination can occur.
- Allow sample to dry for at least 24 hours prior to closing card. Place flap in first slot to create a tent over wet sample.
- Once dry, rubberband samples together in submission order. We do not suggest putting samples in baggies.
- Keep sample out of direct sunlight, extreme temperatures, dust and moisture.
- Twin animals SHOULD NOT have a blood sample submitted for DNA testing, it will fail or cause sample comparison issues.
- Blood samples can be shipped in a standard shipping box or padded envelope.

Tissue Sampling Unit (TSU)

- Only to be collected from the ear with an Allflex Tissue Sampling Collection system.
- Make sure the sample does not include an area of the ear that has been tattooed.
- If necessary, clean ear prior to collecting sample with a dry paper towel to remove any foreign matter.
- Ensure that the TSU is sealed by noting that the green ball is inside the tube and the red stopper is flush with the top.
- Check to see that there is liquid visible in the TSU PRIOR to sending samples. Dry samples cannot be tested.
- Check to see that there is a visible amount of tissue in the TSU. TSUs without tissue cannot be tested.
- Keep TSUs at a constant (room) temperature before, during and after sampling. DO NOT FREEZE and avoid direct sunlight.
- Do not ship TSUs in a basic envelope as they will rip out and be lost in the mail. Use a padded envelope or box.

Semen

- Does not have to be viable in order to be tested.
- Ensure that the straw has been thawed properly and is at room temperate before shipping.
- Place each straw in a separate Ziplock bag to prevent any possibility of cross-contamination.
- Place straw in the cartridge of a pen (ink removed). Carefully package samples in a box.
- Only 1/4 of a 1cc straw is needed. If inventory is limited deposite semen onto a blood card, let dry and submit accordingly.
- Subject to a $2 lab processing fee

Sample Pulls

- Subject to a $2 lab sample retreval fee
- Any animal that has been previously tested through the RAAA can have the sample re-pulled and have additional testing completed. If there is not enough viable sample left then the producer will be notified and a new sample will need to be collected.

DNA Submission Instructions

Step 1: Fill out RAAA DNA Order Form

• Provide Animal and Sample Information.

- Registration number MUST be listed in order to connect DNA result to animals pedigree or place DNA 'on file'.
- DNA Sample Barcode is on the back of the DNA card or side of the TSU. Use the NAAB Semen Code for semen.
- If animal is not registered include all identifiying information (Date-of-Birth(DOB), ID and Sex).

• Select Test(s) for each sample.

- **Genetic Defect(s)***:* Write the abbreviation (SEE BELOW) for the defect to be tested for. Example *'OS'.*
- **GGP**: ANIMAL MUST BE REGISTERED. Includes Parentage. Request by marking X in respective column.

• Enter Potential Parent options.

- Enter sire and dam registration number ***OR*** Group Name of Multi-Sire or Dam group in respective column.
- If parent is not a RAAA registered animal, provide breed abbreviation with that assoc. registration #.

Ex: Canadian Angus = CAN#######, American Angus = UAN#######, Simmental = USM#######

Step 2: Complete Breeding Group information ***(if applicable)***

• Provide information for the multiple sire and/or dam groups on Breeding Group Tab.

- For calf samples that need compared to a group: Write respective group name on order form as parent option(s).
- If parent is not a RAAA registered animal, provide breed abbreviation with that assoc. registration #.

Ex: Canadian Angus = CAN#######, American Angus = UAN#######, Simmental = USM#######

Step 3: Send order to RAAA

• E-mail completed Excel file to dna@redangus.org.

• Mail copy of signed order form, payment and samples to RAAA Office:

Attn DNA
2012 S. Post Rd.
Midwest City, OK 73130

Test Pricing

Test Name	Description	Added to GGP	Price
Hair Sample Processing Fee	Additional to test fee		**$5**
Semen Straw Processing Fee	Additional to test fee		**$2**
Sample Pull Fee	Additional to test fee		**$2**
AM	Arthrogryposis Multiplex - Curly Calf		**$20**
CA	Contractural Arachnodactyly - Fawn Claf		**$20**
MA	Alpha-Mannisodosis		**$20**
NH	Neuropathic Hydrocephalus - Waterhead	$10	**$20**
OS	Osteopetrosis - Marble Bone		**$20**
DD	Developmental Duplication	$20	**$25**
EC	Exercise Induced Collapse		**$25**
BCHF	Bovine Congestive Heart Failure	$9 - added to GGP-100k	**$19**
BLACK	Black/Red Gene Carrier		**$15**
BVD	Bovine Viral Diarrhea	$6*	**$8**
	GeneSeek Genomic Profile (GGP): **Animal must have RAAA registration number**		
GGP	Low Density (100K) - Genomic EPD Enhancement, Parentage, OS and MA testing		**$40**
GGP Defect Bundle	Everything included in GGP (100K) + DD, NH, CA and AM defects		**$95**

RAAA DNA ORDER FORM

DNA

Member Name: _____ **Acct Number:** _____

City and State: _____ **Email:** _____

Include check made to RAAA, provide card info or call ahead with card. Payment due upfront = Name on Card: _____ Card #: _____ Exp.: _____ Billing ZIP: _____

Terms: Upon submitting samples to the Red Angus Association of America (RAAA), the submitting party conveys ownership of the sample to RAAA. The submitting party agrees and acknowledges that RAAA intends to perform genetic testing on the submitted sample to describe the animal's genetics. The submitting party assumes all risks associated with the genetic testing results. RAAA has the right to make results publicly available. In the event of parentage exclusions or genetic defect carriers, notifications will follow RAAA Rules and Regulations. RAAA shall not be held responsible for damages including lost profits, progeny value, embryos/semen, or business interruption. The term 'submitting party' includes any RAAA member/customer submitting or requesting DNA testing.

Signature: _____

Save time: Create and pre-populate Reg #, sire, dam and other animal information by logging into REDSPro and selecting Herd Reports/Downloads > File Download and a group.

Mail samples to:

Attn DNA
2012 S. Post Rd.
Midwest City, OK 73130

SAMPLE TYPE LEGEND

T = TSU H = Hair B = Blood SC = Semen Card SS = Semen Straw

ANIMAL AND SAMPLE INFORMATION **TESTING OPTIONS**

	Registration Number	Animal ID	Prefix	Sex	Birth Date	Sire Reg #	Dam Reg #	Alt Sire Reg #	Sample Barcode / Cane Code	Sample Type (T / H / B / SC / SS)	Genetic Defect(s) AM, CA, DD, MA, NH, OS	BVD	GGP Test - LD / LD Defect	Coat Color	Double Muscle
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	ANIMAL AND SAMPLE INFORMATION											TESTING OPTIONS			
	Registration Number	Animal ID	Prefix	Sex	Birth Date	Sire Reg #	Dam Reg #	Alt Sire Reg #	Sample Barcode / Cane Code	Sample Type (T / H / B / SC / SS)	Genetic Defect(s) AM, CA, DD, MA, NH, OS	BVD	GGP Test - LD / LD Defect	Coat Color	Double Muscle
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	ANIMAL AND SAMPLE INFORMATION											TESTING OPTIONS			
	Registration Number	Animal ID	Prefix	Sex	Birth Date	Sire Reg #	Dam Reg #	Alt Sire Reg #	Sample Barcode / Cane Code	Sample Type (T / H / B / SC / SS)	Genetic Defect(s) AM, CA, DD, MA, NH, OS	BVD	GGP Test - LD / LD Defect	Coat Color	Double Muscle
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	ANIMAL AND SAMPLE INFORMATION											TESTING OPTIONS			
	Registration Number	Animal ID	Prefix	Sex	Birth Date	Sire Reg #	Dam Reg #	Alt Sire Reg #	Sample Barcode / Cane Code	Sample Type (T / H / B / SC / SS)	Genetic Defect(s) AM, CA, DD, MA, NH, OS	BVD	GGP Test - LD / LD Defect	Coat Color	Double Muscle
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	ANIMAL AND SAMPLE INFORMATION											TESTING OPTIONS			
	Registration Number	Animal ID	Prefix	Sex	Birth Date	Sire Reg #	Dam Reg #	Alt Sire Reg #	Sample Barcode / Cane Code	Sample Type (T / H / B / SC / SS)	Genetic Defect(s) AM, CA, DD, MA, NH, OS	BVD	GGP Test - LD / LD Defect	Coat Color	Double Muscle
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Multi-Sire or Dam Group Information

*IF SAMPLE ENCLOSED = YES Then animal must be listed on Order Form for at least Parentage (on file)

Fill out for multisire pastures or dam groups only

Group Name: _____

Please Circle: **SIRE** or **DAM**	Association	Reg #	Tattoo	Sample Enclosed?*
1				
2				
3				
4				
5				
6				

Group Name: _____

Please Circle: **SIRE** or **DAM**	Association	Reg #	Tattoo	Sample Enclosed?*
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6				

Group Name: _____

Please Circle: **SIRE** or **DAM**	Association	Reg #	Tattoo	Sample Enclosed?*
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Group Name: _____

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