

# ANGUS GENETICS INC. LET'S TALK DNA



## SUBMITTING DNA SAMPLES TO AGI:

**Order** DNA cards, hair cards or tissue sampling units (TSU) for DNA collection online or by calling the office.

**Collect DNA samples** - (blood, tissue or hair)

- Tissue sampling units or blood cards are the preferred sampling methods.
- Remember to saturate blood cards thoroughly
- Use TSUs or hair cards when sampling twins
- Collect DNA samples at any age. Hair not recommended for less than 4-months old.

### Animal data

- Information including animal ID, sex, date of birth and sire and dam ID must be recorded at the Association before ordering can take place.
- If animals have not been registered and/or do not have data through AHIR, use the electronic calving book for submission prior to ordering a DNA test.

### Order testing in AAA Login

- BVD can be used with Angus GS or Zoetis HD50K®
- Located under the DNA menu item, order your tests online. Create a new testing order and submit your animals. Then, submit the completed file when you check out. A confirmation email is sent upon receipt of the order. Print it out and include with your samples.
- Available tests: Angus GS<sup>SM</sup>, Zoetis HD50K®, stand-alone parentage, AM, NH, CA, DD, OH, OS, Myostatin (M1), dwarfism (D2) and coat color, GeneMax™ Advantage.

### Mail samples to AGI

- Allow samples to dry for 24 hours before mailing. When sending TSUs, please provide an electronic copy of the barcodes and ID numbers in AAA login uploading the provided template.
- Include your order confirmation printout, and mail the samples to Angus Genetics Inc., 3201 Frederick Ave, Saint Joseph, Missouri, 64506.

### Results

- Test results take 3-4 weeks and are posted when available in your AAA Login account.
- Find results under the DNA menu by clicking Test Results and then View Results.
- If you're ordering genomic tests, EPDs might take an additional week to update.

## COLLECTING DNA SAMPLES:

### BLOOD SAMPLE - PREFERRED METHOD

#### STEP 1:



Record animal ID # (tattoo and/or tag number) on a DNA card.

#### STEP 2:



Prick the vein in the animal's ear with a sterile needle.

#### STEP 3:



Touch the circle on the DNA card to the blood site on the ear. Fill the circle.

#### STEP 4:



Allow the card to dry away from direct sunlight for at least 24 hours prior to mailing. Do not mail the card in a sealed plastic bag.

**PRO TIP:** Wipe the ear clean using cloth or towel before pricking with needle. Don't use any chemicals to clean the ear.

## TSU SAMPLE - PREFERRED METHOD



Scan this code to watch video on how to collect a TSU sample

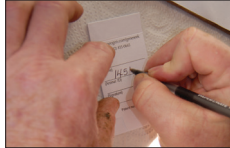


Scan this code for an online guide to TSU sampling

**PRO TIP:** HAIR OR TSU REQUIRED WITH TWINS. HAIR SAMPLE NOT RECOMMENDED FOR ANIMALS YOUNGER THAN FOUR MONTHS.

## HAIR SAMPLE -

### STEP 1:



Record animal ID # (tattoo and/or tag number) on the hair card.

### STEP 2:



Pull from the tail switch "up and away" (20 hairs with root bulbs).

### STEP 3:



Place bulbs on the back flap. Peel off backing paper on sticky flap.



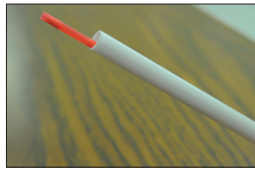
Press sticky side on top of bulbs to seal sides. Hair bulbs must be present to perform tests.



Trim excess hair to the edges of the hair card.

## ADDITIONAL SAMPLING TECHNIQUES

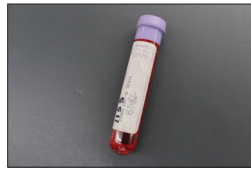
### SEMEN SAMPLE



Insert thawed semen straw into a writing pen with the ink tube removed. Indicate animal ID # (tattoo and/or tag number) on the straw of semen.

Send at room temperature. Ship in a padded envelope or small box.

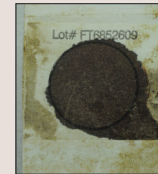
### BLOOD TUBE SAMPLE



Please note the additional handling fee. Mark the purple-top tube with the animal ID # (tattoo and/or tag number). Fill the tube with 6-9 mL of blood. Refrigerate promptly in a stand-up rack between 4-10° C (39.2 - 50° F). Do not freeze. Ship samples overnight with a cold pack in an insulated cooler or container.

### BAD SAMPLE SUBMISSIONS:

#### BLOOD



Contaminated with feces



Not enough blood

#### HAIR



Excess hair not trimmed



No root ball

## PRICING

### Angus GS<sup>SM</sup>

GeneSeek® Angus GS (includes Parentage)	\$37.00
Add Genetic Condition Bundle	\$18.00
Add Coat Color	\$5.00
Add AM test	\$8.00
Add NH test	\$8.00
Add CA test	\$8.00
Add OS test	\$8.00
Add DD test	\$10.00
Add OH test	\$8.00
Add M1 test	\$10.00
Add Dwarfism (D2) test	\$10.00
Add BVD test (hair or TSU only)	\$4.50

### Zoetis Genomic Testing

Zoetis® HD50K (includes Parentage)	\$37.00
Add Genetic Condition Bundle	\$18.00
Add Coat Color	\$5.00
Add AM test	\$8.00
Add NH test	\$8.00
Add CA test	\$8.00
Add OS test	\$8.00
Add DD test	\$10.00
Add OH test	\$8.00
Add M1 test	\$10.00
Add Dwarfism (D2) test	\$10.00
Add BVD test (TSU only)	\$4.50

### Other DNA Tests

Parentage	\$18.00
Genetic Condition Bundle	\$45.00
Coat Color Test	\$18.00
Arthrogryposis Multiples (AM)	\$22.00
Neuropathic Hydrophalus (NH)	\$22.00
Contractural Arachnodactyly (CA)	\$22.00
Osteopetrosis (OS)	\$22.00
Developmental Duplication (DD)	\$22.00
Myostatin (M1)	\$22.00
Oculocutaneous Hypopigmentation	\$18.00
Dwarfism (D2)	\$22.00

Additional sample handling fee of \$2.50 will be charged per sample for samples submitted in blood tubes or hair not on proper hair cards. Tissue sampling units (TSU) not properly labeled on the TSU box or accompanied by an electronic spreadsheet can be subject to additional charges. Genetic Condition Bundle includes the following: AM, NH, CA, OS, DD, M1, D2, OH, and Coat Color.