



## DNA & GENESTAR FREQUENTLY ASKED QUESTIONS

Regulation 9.6 of the MGBCS Rules & Regulations states that 'It shall be the requirement for the registration of all calves born after 31/12/2006 that their sire be DNA fingerprinted by the MGBCS approve laboratory.'

### **When Is The Best Time To Collect My Sample?**

When you have decided to use a bull as a sire or when you are putting a bull out with the cows.

If you are selling a bull that has been used as a sire, collect hair samples before he is transported.

### **Where Do I Collect the Samples From?**

From the switch of the tail pull 20-30 *CLEAN* tail hairs with roots attached.

### **How Do I Submit My Samples?**

Contact the MGBCS and order your DNA and/or GeneSTAR test kits. *Please note that the correct kits must be ordered from the MGBCS before sending any DNA samples away. UQ & Pfizer reserve the right to charge more if this process is not followed.*

Once the hair samples have been collected, package them according to instructions in the *CORRECT* kits that you have been supplied with and complete *ALL* the required paperwork for each animal.

DNA Specific: Send your samples for DNA Typing direct to the University of Queensland (UQ). There is no need to send payment to UQ as you will be invoiced by the MGBCS. *Please note that the MGBCS will only be using UQ to conduct all DNA profiles, parent verifications & recessive genetic factor testing. Profiles for bulls not previously DNA typed that are completed at Pfizer will need to be retested at UQ at the breeders expense.*

GeneSTAR Specific: Send your samples and a cheque for payment to the MGBCS. These samples will then be forwarded to Pfizer Animal Genetics.

### **What Is the Sire Verification Requirement?**

As per Regulation 9.7 from the Rules & Regulations of the MGBCS 'All DNA samples submitted for DNA fingerprinting after 01/03/2009 shall be subject to DNA paternal verification, by the MGBCS approved laboratory.' That is all DNA sample submitted for DNA fingerprinting will be tested against the recorded sire to ensure that the sire is correct.

Therefore when completing the paperwork for DNA profiling, please ensure that you include the Sire details on the Parentage Verification section of the form. *Do not include the dam details unless you are wanting to do a complete parent verification on a calf.*

### **What Happens If I Don't Fill Out the Paperwork Correctly or use the correct kits?**

If samples that are sent via the MGBCS do not have the correct paperwork filled out then the samples will be kept and not submitted for testing until the breeder has filled out the required paperwork correctly.

If samples are sent using the incorrect kits, then the samples may be returned to the breeder to be correctly packaged.

### **What Happens With My Results?**

Results are forwarded to the MGBCS and you will be notified of results that have been received.

If you have registrations pending because you are waiting on a DNA test, please contact the MGBCS and notify Adele that the DNA has been received.

### **What Should I Do If I Have Used A Bull That Has Died & There *Is Semen Available?***

A standard DNA test kit should be requested from the MGBCS and an unused straw should be packaged so it will not break in the post and it should be sent to the University of Queensland.

If limited semen is available the best method is to collect one drop of semen on a small square of blotting or absorbent paper prior to insemination and send this off in a standard kit.

### **What Should I Do If I Have Used A Bull That Has Died & There *Is No Semen Available?***

Any sire used since 2006 should have had a hair sample collected for DNA testing to allow for any progeny to be registered.

If no DNA is available, please write a letter to the MGBCS Board of Directors explaining your situation and the reasons why a DNA sample has not been collected and your case will be examined. *Please note that after 31<sup>st</sup> of December 2012 no exemptions will be given. All requests must be with the MGBCS by this date.*

### **How Do I Know If a Bull I Am Using Has Been DNA tested?**

Use the 'Animal Enquiry' Screen via the MGBCS website by searching for the animal using their name or ident. If the bull has been DNA typed then the words 'DNA Typed' and a number will appear in the animals' details. If this information does not appear then the animal has not been DNA typed and you need to contact the MGBCS for a sample kit. Alternatively you can contact the MGBCS.

## **Frequently Asked Questions – Testing for Genetic Conditions**

Following the recent release of the information relating to the recessive genetic conditions, AM, NH and CA, a number of members have contacted the MGBCS for further information. Answers are provided below to a number of the most frequently asked questions.

### **I am interested in testing animals with no DNA stored, what is the process?**

The process to test animals for AM, NH & CA is the same as the current process required for DNA profiling of animals. In fact the tests for the genetic conditions can all be done at the same time as a DNA profile. To test an animal, contact the MGBCS to request DNA test kits, instructions on how to collect samples will be included, as well as the relevant paperwork to be completed. Please ensure that this paperwork is fully completed and sent away with the sample.

### **I am interesting in testing animals with DNA already stored at UQ, what is the process?**

Contact the MGBCS directly and provide them with the idents of the animals you wish to be tested for the relevant tests. The MGBCS will contact the University of Qld (UQ) Laboratory and ask them to determine whether or not they can conduct the tests with the DNA sample they have stored.

Should there not be enough DNA available to conduct the tests, the MGBCS will contact you and ask you to submit more samples for DNA testing.

### **I am interested in testing animals with DNA already stored at Pfizer, what is the process?**

While the MGBCS would recommend as many tests as possible be conducted at UQ, if you have animals with DNA already stored at Pfizer, you should contact the MGBCS directly and provide them with the idents of the animals you wish to be tested for the relevant genetic conditions. The MGBCS will contact the Pfizer Laboratory and ask them to determine whether or not they can conduct the tests with the DNA sample they have stored.

Should there not be enough DNA available to conduct the tests, the MGBCS will contact you and ask you to submit more samples for DNA testing, preferably through the UQ Laboratory.

### **What type of DNA sample can be tested? (ie. hair, semen, tissue and blood)**

Either of the laboratories (UQ or Pfizer) can accept samples of hair, semen, tissue or blood for testing. The standard DNA kits that the MGBCS sends out to members are for collecting hair samples. Semen samples can also be submitted using these kits, but because semen samples require submission of a full semen straw, it is highly recommended that the straw is placed between thick cardboard so that the straw cannot be bent while in the post.

If you wish to submit blood or tissue samples, please contact the MGBCS and we will provide you with the information you will need to collect and submit these samples.

### **How do I receive my results?**

Provided that all paperwork is completed properly and submitted with the DNA samples, the process to receive results is the same as the process currently in place for reporting DNA profile results.

Results will be provided to the MGBCS and will be forwarded to the relevant member as they are received. The results will also be stored on the MGBCS database for inclusion in the routine GeneProb analyses.

**Who should I contact if I have any questions regarding testing?**

Please contact the MGBCS, Ph – 02 6773 2022 or Gemma Wilkinson from Southern Beef Technology Services, Ph - 02 6773 3265 or Email [gemma@sbts.une.edu.au](mailto:gemma@sbts.une.edu.au)

*Please note that all new samples should be submitted directly to the UQ in the correct test kits (as provided by the MGBCS) and with the paperwork fully completed. Samples submitted to the UQ incomplete or submitted to the MGBCS may be sent back to you with a request for the correct information to be provided.*

**How Much Does It Cost? (all prices are GST inclusive)**

GeneSTAR MVP Testing	\$55
DNA Profile & Parent Verification (hair or blood)	\$28.60
DNA Profile & Parent Verification (semen)	\$41.80
Parent Verification after DNA	\$7.70
AM (hair/blood)	\$28.60
AM (tissue/semen)	\$45.10
NH (hair or blood)	\$28.60
NH (tissue/semen)	\$45.10
CA (hair or blood)	\$38.50

**TESTS REQUESTED TOGETHER:**

AM & NH (hair or blood)	\$38.50
AM & NH (tissue/semen)	\$55.00
DNA & AM (hair/blood)	\$50.60
DNA & AM (tissue/semen)	\$63.80
DNA & NH (hair/blood)	\$50.60
DNA & NH (tissue/semen)	\$63.80
DNA & AM & NH (hair/blood)	\$56.20
DNA & AM & NH (tissue/semen)	\$73.70
EMAI's PI test	\$20.00