

SAMPLE HANDLING

For Canine DNA testing at the University of Missouri

Blood Sample - The ideal sample for DNA extraction is 3 to 7cc's of whole blood, in **purple-topped (EDTA)** tubes (one or several, depending on tube size). For very small dogs, 1 to 2 ccs should be sufficient. Please do not send less than 1 cc. The blood sample needs only to be put in the tubes and rocked gently a few times to distribute the anticoagulant - do **not** spin, extract serum, or do anything further. Refrigerate if the sample is being held for any time before shipping, but do not hold the sample longer than 1 week before shipping or it may become unusable.

Frozen Semen - Frozen semen stored from deceased sires or affected dogs can be a source of DNA for testing. Please send about 1 breeding unit. The straws or pellets do not need to be shipped frozen, but do pack them in a crush-proof & leak-proof container. Special handling fee is \$40 for this sample, in addition to the regular testing fee.

Tissue Sample - DNA can be extracted from any cell-rich tissue. If a dog is to be tested post-mortem, a 1" cube (or equivalent) of tongue, other major muscle, spleen, kidney, or liver will provide a large amount of DNA (one tissue is sufficient – do not send multiple tissues). Tissue samples should be placed in a clearly labeled freezer bag or other sterile container and frozen. **DO NOT place in formalin!** Place the bagged tissue inside another bag, freeze, and ship with a frozen cool pack (do not use dry ice, or ice cubes placed in a ziplock bag). If this is the only sample (no blood sample available), add special handling fee of \$40 to testing fee.

Label sample with the following:

call name - owner's last name

(If samples from several dogs are sent together, number samples and forms)

The ***Individual Dog Information Form & Survey*** that follow this instruction sheet should be completed, and a ***pedigree copy***, if available, should be included with the sample.

Include TESTING FEE of \$65 for all dogs. Fee payable via check or money order payable to "University of Missouri", or major credit cards (Visa, MC, AmEx, Discover).

Shipping – Ideally, blood samples should be shipped immediately, tissues should be frozen first. If samples are held for a couple days or over a weekend, blood must be refrigerated, and tissue samples must be kept frozen. Ship for **next day** delivery (FedEx, US Mail-Express service, or UPS). **Do not send on a Friday** - there will not be anyone to accept the delivery on a weekend, and the sample could be unusable by Monday. Pack in a small insulated container (Styrofoam box, small cooler or insulated lunch bag), with one or more cool packs - it is important that blood samples be kept cool but not frozen, and tissue samples be kept as frozen as possible.

The delivery address is;

Canine Genetics Lab – GM2 Testing
320 Connaway Hall - UMC
1500 Bouchelle Ave
University of Missouri
Columbia, MO 65211

(NOTE: if UPS does not recognize 320 Connaway as a valid address, use 201 Connaway)

If you need clarification, or have any questions about any of these procedures, please contact the lab by phone (573-884-3712), email (MUCVMk9genetics@missouri.edu), or regular mail (321 Connaway Hall, University of Missouri, Columbia, MO 65211).

GM2 DNA TEST REQUEST

Sample type: Blood – Tissue – FTA-swab – semen - other _____ Breed: _____

Registered Name _____ Call name _____

Reg# _____ Birth Date _____ Male / Female - - Intact / Neutered

Microchip or Tattoo: _____ Color _____

Test Being Requested: GM2 - gangliosidosis

Owner: name _____ Veterinarian _____

address _____ address _____

city-st-zip _____ city-st-zip _____

phone _____ phone _____

cell _____

EMAIL _____ **EMAIL** _____

******Results are reported via email – please provide complete, legible email address!******

Report test results to (please circle): Owner Veterinarian Both

PAYMENT INFORMATION: Check or money order payable to “University of Missouri” enclosed

OR Charge to VISA-MC-AmEx-Discover Card# _____

Cardholder name: _____ Exp Date: _____

FEE: = \$65; frozen semen or tissue, + \$40 **Receipt email:** _____

Does this dog show symptoms of gangliosidosis? Yes No (if Yes, please include clinical history)

Does this dog exhibit any of the following conditions? (Please attach history for any Yes answer)

- | | |
|-----------------------------------|--|
| Y - N Allergies | Y - N Digestive difficulties |
| Y - N Arthritis | Y - N Heart Problems |
| Y - N Autoimmune Disorders | Y - N Hernia (where? _____) |
| Y - N Bite or Tooth Abnormalities | Y - N Reproductive Problems |
| Y - N Cancer / Tumors | Y - N Seizures |
| Y - N Cataracts / Vision Problems | Y - N Skin / Coat Problems |
| Y - N Deafness / Hearing Impaired | Y - N Skeletal Abnormalities (Hip Dysplasia, etc.) |
| Y - N Hindlimb weakness/paralysis | Y - N Temperament Problems (shy, aggressive, etc.) |

other (please list):

Comments / Questions / Concerns? _____

I submit this sample and pedigree for the purpose of DNA testing; I understand that DNA left over following the test may be stored for potential future research; I understand that the results of this test will be reported only to the owner listed on this form and to the veterinarian (if requested) listed here, via email; and I have supplied complete and accurate information, to the best of my knowledge.

Signed: _____ date _____