

SAMPLE HANDLING

For Canine DNA research & 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

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 samples. Fee payable via check to "University of Missouri", or major credit cards (Visa, MC, AmEx, Discover) via our online payment portal.

Shipping - Ideally the sample should be shipped immediately. If samples are held for a day or over a weekend, blood must be refrigerated, and tissue samples must be kept frozen. Ship via overnight delivery (US Mail, UPS, FedEx, or others). **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 samples be kept cool.

The delivery address is: Canine Genetics Lab – MDR1 testing
320 Connaway Hall / 1500 Bouchelle Ave
University of Missouri
Columbia, MO 65211

(note: If shipping via UPS, use 201 Connaway Hall – they may not recognize 320 as a valid address)

If you need clarification, or have any questions about any of these procedures, please contact us via email (MUCVMk9genetics@missouri.edu) , or by calling 573-884-3712

CANINE DNA TESTING

Individual Dog Information

Blood – Tissue – other _____

Breed: _____

ID code (lab assigned): _____

Registered Name _____ Call name _____

Reg or PID# _____ Birth Date _____ Sex? M – F Intact - Altered

Sample Submission Date: _____ Color _____

Test requested: **MDR1 – multi-drug resistance**

Owner: name _____ Veterinarian _____

address _____ address _____

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

phone (day) _____ phone _____

phone (eve) _____

cell _____

EMAIL _____ EMAIL _____

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

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

Does this dog have a history of abnormal reaction to drugs? No Yes – (please list) _____

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.)
other (please list on back):	Y - N Temperament Problems (shy, aggressive, etc.)

Please circle your response to the following;

- I am / am not willing to provide additional blood samples if needed for research.

I submit this sample and pedigree for the purpose of DNA testing & potential future research; I understand that the identity of dogs and owners participating in testing & research will not be revealed; and I have supplied complete and accurate information, to the best of my knowledge.

Signed: _____ date _____

Test fee \$65 for all dogs

PAYMENT INFORMATION: ☐ Check payable to "University of Missouri" enclosed

OR ☐ Charge to VISA-MC-AmEx-Discover

Send payment portal instructions and code to this email: _____