

GENETIC TESTING FOR PLN-ASSOCIATED VARIANT GENES



GUIDANCE ON TESTING SEMEN



August 2012



Introduction

- After years of research supported by hundreds of Wheatens, their owners and breeders, Drs. Meryl Littman and Paula Henthorn at Penn Vet have identified mutations associated with PLN in two genes
- As a result of the research, interest has increased in using some deceased dogs' frozen semen.
- This guide is designed to assist those owners with how to submit frozen semen for testing
- Continue to watch the website for more information

<http://www.scwtca.org/health/dnatest.htm>





Guidelines

- A single or 1/2 of a straw can be submitted.
- The straw should be sent as if it were fresh chilled, with no extender added.
- The straw can be sent 2nd Day Fed Ex
- It should be sent to arrive Tuesday, Wednesday or Thursday... NO weekends, holidays or between Christmas and New Year's Day.
- Contact Dr. Littman prior to sending.
- Cost is the same as for a cheek swab (\$125.00)
- Results will take longer to receive.
- Please remember to send:
 - Completed **and signed** submission form. You can use the one on the website <http://www.scwtca.org/health/dnatest.htm> or print the last page.
 - A **4-generation pedigree**.
 - A copy of the dog's registration.
 - Payment





For more information

Check the SCWTCA website for:

- Audio of Dr. Meryl Littman's presentation on May 5, 2012FAQs for owners and breeders
- Research abstract presented at Tufts in 2011
- Submission form and instructions
- Calendar of kit distribution events
- Contact information for more assistance
- ...and watch for more resources

<http://www.scwtca.org/health/dnatest.htm>



PLN-Associated Variant Genes DNA Test

Owner Information

First Name: _____ Last Name: _____
Address: _____
City: _____ State: _____ Zip: _____ Country: _____
Daytime Phone: _____ E-mail: _____
Co-Owners' Names: _____

Send E-mail Report To: *Unsigned, advance report sent by e-mail to:* Veterinarian Owner

Veterinarian Information

First Name: _____ Last Name: _____
Clinic Name: _____ E-Mail: _____

Dog Information

Registered Name: _____
Call Name: _____ Registration #: _____ AKC Other: _____
Birthdate (mm/dd/yy): _____ Sex: Male Female Intact or Neutered
Sire's Reg. Name _____ Sire's Registration #: _____
Dam's Reg. Name _____ Dam' Registration #: _____

Sample Information

Date of Sample Collection (mm/dd/yy): _____
(Check one) Blood (purple top tube) OR Cheek brushes OR Tissue sample
Reason for Testing: General Screening Breeding Breed: SCWT OR Airedale
(Check all that Apply) Relative Known to Be Affected/Give Relationship _____
 Other _____

Authorization

To the best of my knowledge, the information I have supplied is accurate. I understand that the sample I have submitted may be used for further research to develop additional genetic tests for protein-losing enteropathy or other inherited diseases in dogs.

Owner's Signature: _____ Date (mm/dd/yy): _____

Payment Information

Please submit \$125 US dollars for each sample submitted, and check your payment method. Call if DNA is in our Bank. Call if you have a deceased dog you want tested. \$100/each pup if **more than 3** samples/litter (with max. \$500 per litter).

Check or Money Order (US only) to: Trustees of the University of Pennsylvania (write "PLN test" on memo line)

VISA MasterCard Credit Card Number: _____ Exp. Date _____

Signature: _____ Name on Card: _____

The "PLN-Associated Variant Genes" DNA Test Submission Form" is for submitting a sample for DNA testing to the University of Pennsylvania. Feel Free to duplicate and distribute this form and instructions to others. *Last updated Aug 8, 2012*

Sample Submission Instructions

Blood Sample Collection (performed by a veterinary clinician or nurse)

1. Label EDTA (purple top) tube with owner's last name and animal's call name (or AKC#)
2. Draw a 1-2 ml blood sample from dogs or 0.5 ml from puppies weighing 120-500 grams (4.25 - 17.5 oz.)
3. The blood sample must be kept cold but not frozen. In the summer, consider sending the sample (see #5 below) with an ice pack inside a white Styrofoam box.
4. Complete required submission form and mail with sample, along with a copy of the dog's registration.
5. Mail EDTA purple top tube in mailer by overnight or **2-day** delivery by UPS or FedEx. (Note that mail from the US Postal service takes extra time in the Penn mail system and is not trackable to our laboratory.) Your veterinarian may have special Styrofoam containers or cardboard mailers to send blood tubes. Please place tubes in a Ziploc® (or similar) sealed plastic bag, then in bubble wrap for protection.
6. **Do NOT submit samples to arrive on weekends, holidays, or between Christmas and New Year's Day.**

Cheek (Cytology) Brush Collection (performed by the owner)

To receive cytology brushes, send a **self-addressed, stamped, business envelope FOR EACH DOG** to:

Michael Raducha/ PLN Test
Ryan Veterinary Hospital, Rm. 4022
University of Pennsylvania School of Veterinary Medicine
3900 Delancey St.
Philadelphia, PA 19104-6010

1. Two brushes are needed for each dog tested. **WASH YOUR HANDS BEFORE COLLECTING SAMPLES.**
2. **TO AVOID CONTAMINATION AMONG PETS THAT SHARE WATER or FOOD BOWLS, TOYS, CHEWS, ETC.** we recommend that dogs be separated for 3 hours or overnight before swabbing them. **To avoid contamination by food, do not feed the dog for a minimum of 3 hours before you collect the sample** and do not allow him/her to be unobserved in the yard where he/she may be coprophagic.
3. Puppies can be swabbed once they are weaned and if kept away from the dam and other pups overnight. We recommend submitting blood samples from lactating bitches, unweaned puppies, or coprophagic dogs.
4. Ask a second person to gently restrain the dog's head as you collect the sample, if necessary.
5. **If you are collecting samples from more than one dog, collect samples from one dog at a time, and always wash your hands between dogs.**
6. Label the envelopes that contain the cheek swab brushes with the owner's name **AND** the dog's name.
7. Open the end of the swab package that shows the word, "**peel**", printed on it. Be careful not to touch the brush ends as you remove the swab.
8. Insert the brush ends between the dog's gums and the inside of the cheek. Briskly rub the brush on the surface of the inside of the cheek for **15-20 seconds** to pick up cheek cells. **Make sure that the brush is in contact with the cheek and not just the saliva.**
9. **Allow the brush to air dry, return the brush to its original package, and tape the opened ends shut.**
10. **Repeat steps 3-5 for the other brush.**
11. Secure the 2 air-dried brushes in their sleeves in a **separate Ziploc® (or similar) sealed bag for each dog.**
12. Complete the required submission form for each dog (printed or typed) and mail with the sample.

Ship sample(s) to: Dr. Meryl Littman / PLN Test
University of Pennsylvania School of Veterinary Medicine
3900 Delancey Street, Room 2055
Philadelphia PA, 19104-6010 (Phone No. (for FedEx) 215-898-9288)

ALL signed reports are mailed to the owner. Unsigned, advance e-mail reports can be sent to the owner and veterinarian if requested.

Have you included?	1. Signed submission form	2. Copy of dog's registration form
	3. Payment	4. Blood or two cheek brush samples