

Veterinary Instructions for Submission

1. The veterinarian or owner must obtain the "Application for Thyroid Database" from the Orthopedic Foundation for Animals, Inc. (phone 573-442-0418), or online at www.offa.org.
2. The veterinarian and owner must complete their respective portions of the form.
3. Two milliliters (2 ml) of serum are needed for testing, and the serum sample must be from freshly collected blood. Use a plain "red-top" tube for blood collection. Do not use a serum separator tube with clot additives or any other type of plasma collection tube. After collection, place the blood sample in the refrigerator for 60 to 90 minutes to allow clotting. Centrifuge, collect the serum, and transfer to a plain plastic or glass tube suitable for shipping. Clearly label the sample with the owner's name, animal's identification, date of blood collection, and "OFA Thyroid Panel." If the specimen is to be stored for more than 12 hours prior to shipping, frozen storage is recommended.
4. Ship to the approved laboratory of choice via an overnight courier service. It is recommended that all specimens be packaged properly and shipped so they are received either chilled or frozen. Serum samples arriving unchilled or at room temperature within 48 hours of the collection date will be accepted. However, samples arriving after this time must be stored either chilled or frozen and arrive at the lab at room temperature or less. Contact the laboratory for further information as necessary.
5. Female dogs should not be tested during an estrus cycle. The date of last routine vaccination should be noted.
6. Please do not submit whole blood, clotted blood, or plasma.
7. Severely lipemic or hemolyzed specimens are also unacceptable.
8. Note the date of last routine vaccination on the application.
9. Test results will be mailed or faxed only to the submitting veterinarian and the Orthopedic Foundation for Animals, Inc.. Results will not be available from the laboratory by telephone. The OFA will send a report to the owner.

Thyroid Labs

The approved laboratory must be contacted for the appropriate submission forms, sample handling procedures, and laboratory service fee before collecting the sample. Currently, samples may be submitted to:

Animal Health Diagnostic Center (AHDC), Endocrinology Laboratory, Cornell University, 240 Farrier Rd., Ithaca, NY 14853, (607) 253-3673

Animal Health Laboratory, Laboratory Services Division, University of Guelph, Specimen Reception, 419 Gordon St., NW Corner Gordon/McGilvray St, Guelph, Ontario, N1G 2W1, CANADA (519) 824-4120 X54530, Fax (519) 827-0961

Antech Diagnostics, 1111 Marcus Ave., Suite M28, Lake Success, NY 11042, 1-800-872-1001. (Only the Lake Success, NY location of Antech has been certified to process OFA thyroid panels.)

Michigan State University Veterinary Diagnostic Laboratory 4125 Beaumont Road Room 122, Lansing, MI 48910, (517) 353-1683, Fax (517) 353-5096

IDEXX, 1345 Denison Street, Markham, Ont L3R 5V2, CANADA, 1-800-667-3411

Texas A&M Veterinary Medical Diagnostic Laboratory, 483 Agronomy Rd, College Station, TX 77840, (979) 845-3414

University of California-Davis Veterinary Medical Teaching Hospital, Central Laboratory Receiving, VMTH Room 1033, 1 Garrod Drive, Davis, CA 95616, (530) 752-VMTH, Fax: (530) 752-5055

Note: Please contact the laboratory for information about sample collection and submission. Include OFA form and fee with submission and the lab will forward results to OFA.

Indices of thyroiditis:

- a. Free T4 (FT4)—this procedure is considered to be the "gold standard" for assessment of the thyroid's production and cellular availability of thyroxine. FT4 concentration is expected to be decreased in dogs with thyroid dysfunction due to autoimmune thyroiditis.
- b. Canine Thyroid Stimulating Hormone (cTSH)—This procedure helps determine the site of the lesion in cases of hypothyroidism. In autoimmune thyroiditis the lesion is at the level of the thyroid and the pituitary gland functions normally. The cTSH concentration is expected to be abnormally elevated in dogs with thyroid atrophy from autoimmune thyroiditis.
- c. Thyroglobulin Autoantibodies (TgAA)—This procedure is an indication of the presence of the autoimmune process in the dog's thyroid.

Certification

a. Normal

FT4 Within normal range
cTSH Within normal range
TgAA Negative

b. Positive autoimmune thyroiditis

FT4 Less than normal range
cTSH Greater than normal range
TgAA Positive

c. Positive compensative autoimmune thyroiditis

FT4 Within normal range
cTSH Greater than normal range or
 Equal to normal range
TgAA Positive

d. Idiopathically reduced thyroid function

FT4D Less than normal range
cTSH Greater than normal range
TgAA Negative

e. All other results are considered equivocal