

## Antech Diagnostics Test Guide

TEST	SAMPLE	QUANTITY	FAST	PROTOCOL	COMMENTS
ACTH Stimulation Test	Separated serum, spun SST	0.5 ml	8-12 hours	Collect resting (pre) sample. In dogs, inject 1 vial (0.25 mg) Cortrosyn IM or 5ug/kg Cortrosyn (max. dose 0.25 mg) IV. Collect a 1 hour post sample. If using ACTH gel, administer 2.2 U/kg IM and collect a 2 hour post sample.	In cats, collect pre sample and administer 0.125 mg (1/2 vial) of Cortrosyn IM or IV and collect a 30 minute and 60 minute post sample. If using ACTH gel the dose is 2.2 U/kg IM. Collect pre, 1 hour and 2 hour post samples.
Bile Acids	Separated serum, spun SST	0.5 ml	See protocol	Fast for 12 hours. Draw pre sample. Feed at least 2Tbsp of canned food for patients >5kg and at least 2tsp of canned food for patients <5kg. Collect 2 hour post prandial sample.	Hemolysis or lipemia may cause spurious results and should be repeated. In patients with encephalopathic signs, feed a protein restricted food mixed with a small amount of corn oil.
Bromide concentration	Separated serum. <b>DO NOT USE SST</b>	0.5 ml	NO	Timing of sample in relation to administration of medication is unimportant due to long t1/2 of bromide.	Steady state concentrations are not reached for 3-4 months after treatment is started or dosage is changed. <b>DO NOT USE SST.</b>
Digoxin concentration	Separated serum. <b>DO NOT USE SST</b>	0.5 ml	NO	Trough concentrations (6-8 hours after the last dose or immediately prior to the next dose) are recommended.	Steady state concentrations take 7-10 days to reach after treatment is started or dosage is changed. <b>DO NOT USE SST.</b>
Fructasomine	Separated serum, spun SST, separated plasma (heparin or EDTA)	1 ml	NO	Timing of sample in relation to insulin administration is not important.	Spuriously decreased by hemolysis. Periodic monitoring, used in conjunction with clinical signs, is useful in monitoring diabetic regulation. Can be used to help differentiate stress hyperglycemia from diabetes mellitus.
High dose dexamethasone suppression test (HDDS)	Separated serum, spun SST	0.5 ml	8-12 hours	Collect resting (pre) sample. Inject 0.1 mg/kg or 1 mg/kg (either dose is acceptable) azium or dexamethasone sodium phosphate IV. Collect and 8 hour post sample. A 4 hour post sample is optional.	Suppression (indicating PDH) is defined as cortisol concentration less than 50% of the baseline concentration or less than 1.4 mg/dl 4 or 8 hours after dexamethasone administration. Failure of cortisol suppression does not enable differentiation of adrenal tumor from PDH.
Endogenous ACTH concentration	Plasma from an aprotinin-containing LTT (see protocol)	0.5 ml	8-12 hours	Use aprotinin-containing LTT for sample collection, centrifuge immediately and transfer plasma to a plastic vial. Antech will provide the necessary tubes. Transport on ice or cold packs. So not use any plain uncoated glass tubes or pipettes.	Endogenous ACTH concentrations will be increased (>45 pg/ml) in approximately 55% of dogs with PDH. Endogenous ACTH concentrations will be suppressed (<15 pg/ml) in approximately 60% of dogs with adrenal tumor hyperadrenocorticism. A value between 15 and 45 pg/ml is non-diagnostic.
Free T4 by equilibrium dialysis (ED)	Separated serum, spun SST	0.5 ml	NO	If sending in with a chemistry profile, please submit 2 SST.	Used to help distinguish hypothyroidism from sick euthyroidism in dogs and to help diagnose occult hyperthyroidism in cats.
Insulin-glucose pair	Separated serum, spun SST, separated heparinized plasma	1 ml	NO	To diagnose an insulinoma, the sample for insulin determination must be collected while the dog is hypoglycemic (glucose <60 mg/dl).	A normal or increased insulin concentration in the presence of hypoglycemia supports a diagnosis of insulinoma.
Low dose dexamethasone suppression test (LDDS)	Separated serum, spun SST	0.5 ml	8-12 hours	Collect resting (pre) sample. Inject 0.01 mg/kg dexamethasone (azium or dexamethasone sodium phosphate) IV. Collect 4 and 8 hour post samples. In cats the LDDS is done using dexamethasone dose of 0.1 mg/kg.	Marked lipemia may decrease cortisol concentrations. Failure of cortisol suppression to less than 1.4 mg/dl at 8 hours is supportive of hyperadrenocorticism. Suppression of the 4 hour cortisol to less than 1.4 mg/dl or to less than 50% of the resting cortisol concentration with escape at 8 hours is supportive of PDH. An 8 hour cortisol less than 50% of the resting cortisol concentration, but still not suppressed to less than 1.4 mg/dl is supportive of PDH.
Parathyroid hormone (PTH)	Spun SST- <b>DO NOT UNCAP OR EXPOSE TO AIR</b>	1.5 ml	NO	<b>DO NOT UNCAP OR EXPOSE TO AIR.</b> Samples that have been exposed to air cannot be used for Ionized Calcium. Spin SST and send on ice or cold packs (dry ice is not necessary).	Used to investigate hypercalcemia and to monitor renal secondary hyperparathyroidism.
Phenobarbitol concentration	Separated serum, <b>DO NOT USE SST</b>	0.5 ml	8-12 hours	At steady state, peak and trough phenobarbitol concentrations will not differ appreciably and timing of sample collection is not critical.	Steady state concentrations are not reached for 2-3 weeks after treatment is started or dosage is changed. Marked lipemia will interfere. <b>DO NOT USE SST.</b>

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T3 Supression	Separated serum, spun SST, heparinized plasma	1 ml at each collection time	8-12 hours	Obtain sample for T3 and T4 measurement. Administer T3 orally using 25 mg tablets as follows: Give one tablet 3x daily for 2 days. On the morning of the 3rd day, administer the last dose of T3 (7 doses total). Obtain sample 2 to 4 hours after the last T3 dose for T3 and T4 measurement.	Moderate to marked amount of hemolysis may falsely decrease results. interpretation: The T3 concentration should increase in all cats properly tested. Hyperthyroid cats have post-pill T4 concentrations greater than 2.0 mg/dl. Normal cats have post-pill T4 concentrations less than 1.5 mg/dl. Post-pill T4 concentrations between 1.5 and 2.0 mg/dl are non-diagnostic.
TLI	Separated serum, spun SST	1 ml	8-12 hours	Should be off pancreatic enzyme supplementation for 24 hours prior to testing.	TLI aids in the diagnosis of exocrine pancreatic insufficiency (decreased concentrations) and pancreatitis (increased concentrations).
B12/Folate	Separated serum, spun SST	0.5 ml	8-12 hours		Must also measure TLI to enable correct interpretation. Aids in the diagnosis of small intestinal bacterial growth and small intestinal disease.
Urine protein: creatinine ratio	Fresh urine	1 ml	NO		The urine protein:creatinine ratio must be elevated in conjunction with urine sediment findings as hematuria or inflammation can result in elevated ratios.
Urine cortisol: creatinine ratio	Fresh urine	1 ml	NO	It is best to have client collect urine at home to minimize stress-induced elevated ratios.	An elevated urine cortisol:creatinine ratio is a sensitive but non-specific test for hyperadrenocorticism. Further testing (ACTH stimulation or LDDS) is required to confirm a diagnosis of hyperadrenocorticism.
Von Willebrand's factor	BTT or LTT <b>SEND ON ICE OR COLD PACKS</b>	Fill tube to capacity	NO	Plasma needs to be separated and transferred to a clean plastic tube if transport to the lab takes more than 12 hours.	<b>MUST SEND ON ICE OR COLD PACKS.</b> Freezing plasma is not necessary unless transport to the lab is delayed for more than 24 hours.