






UTCVM PARASITOLOGY LABORATORY



Heartworm Testing

ROUTINE TEST COMPONENTS	PROS	CONS
 <ul style="list-style-type: none"> • Dirochek™ ANTIGEN • Knott's: Microfilaria 	Highest sensitivity for <i>as few as</i> 1-2 adult females	Poor sensitivity for male only infection or immature female worms
 <ul style="list-style-type: none"> • Idexx 4DxPlus™ ANTIGEN & <i>Borrelia burgdorferi</i>, <i>Anaplasma phagocytophilum</i>/ <i>platys</i>, & <i>Ehrlichia canis/ewingii</i> ANTIBODIES • Knott's: Microfilaria 	<ul style="list-style-type: none"> • Sensitivity increased when more than 2 adult females present • Detects <i>Borrelia</i> antibodies from natural infection; not detected from specific vaccines 	<ul style="list-style-type: none"> • Poor sensitivity <2 female worms, male only infection, or immature female worms • Tick-borne pathogen antibodies presence/absence only (NO numeric titer) • NO detection of <i>Rickettsia rickettsii</i> (RMSF) • NO distinction of <i>Anaplasma</i> or <i>Ehrlichia</i> species antibodies
 <ul style="list-style-type: none"> • Dirochek™ ANTIGEN 	<ul style="list-style-type: none"> • Highest antigen sensitivity for <i>as few as</i> 1-2 adult females 	<ul style="list-style-type: none"> • Poor sensitivity for male only infection or immature female worms (more common in cats)
SPECIALTY TESTS & COMPONENTS	PROS	CONS
 <p>Verification Panel</p> <ul style="list-style-type: none"> • Dirochek™ ANTIGEN • Idexx SNAP™ or SNAP 4DxPlus™ • Knott's: Microfilaria 	<ul style="list-style-type: none"> • Confirmation of an initial POSITIVE result using multiple tests • Aid in diagnosis for complex cases <p>*** <i>Exclusive to UTCVM Parasitology Lab!</i> ***</p>	
 <ul style="list-style-type: none"> • Knott's: Microfilaria (3 month post-treatment) 	<ul style="list-style-type: none"> • Kills and stains microfilariae • Differentiate <i>Dirofilaria immitis</i> and <i>Acanthocheilonema reconditum</i> 	<ul style="list-style-type: none"> • No microfilariae present in male only infections, or immature female worms • Microfilariae can survive for up to 2 years

Comprehensive review by American Heartworm Society Guidelines heartwormsociety.org