

Clinical Microbiology and Molecular Diagnostics Laboratory

Microbiology Tests	Specimens:	Sample volume required:	Collection container:	Additional information:
Aerobic Culture and Susceptibility	all	Call laboratory with questions	Port-a-cul preferred; call laboratory with questions	Aerobic culture includes identification of bacterial organisms (with enrichment) and antimicrobial susceptibility determination of relevant pure culture
Aerobic and Anaerobic Culture with Susceptibility	all	Call laboratory with questions	Port-a-cul preferred; call laboratory with questions	Identification of aerobic and anaerobic organisms from samples and antimicrobial susceptibility determination on aerobic isolates when relevant
add on susceptibility (2 drugs)	all	Call laboratory with questions	Port-a-cul preferred; call laboratory with questions	Aerobic culture includes identification of bacterial organisms (with enrichment) and antimicrobial susceptibility determination of relevant pure culture
Blood culture	blood	3 mL; 10 mL (depends on bottle size)	BACTEC™ blood culture media-aerobic only (standard or pediatric)	Consult with the laboratory prior to submitting
Salmonella Culture +PCR	feces; GI tract	2 g	Clean, plastic, sealed container. Sample should be refrigerated at 4-7C	No feed samples accepted
Gram Negative screen	cloacal swab		Port-a-cul	Will screen for beta-hemolytic <i>Staphylococcus</i> , Gram negative rods and yeast.
Acid Fast stain	affected tissue, lesion or fluid; impression smear of affected site		Port-a-cul; plastic, clear container; impression slide	Sample may be submitted alone or in conjunction with a request for culture
Gram stain	Affected tissue, lesion or fluid; impression smear of affected site;		Port-a-cul; plastic, clear container; impression slide	Sample may be submitted alone or in conjunction with a request for culture
Brucella RSAT	serum	1 mL	Red top blood collection tube	
Leptospira serology + PCR	serum + urine	1mL (serum) and 2mL (urine)	Red top blood collection tube	
Mycology Tests	Specimens:	Sample volume required:	Collection container:	Additional information:
Fungal culture-Common	fresh tissue or body fluid; swab of infected area		Port-a-cul or sealed container	Fungal susceptibilities are not included in testing fee. Please call laboratory with questions.
Fungal culture- biphasic	fresh tissue or body fluid; swab of infected area		Port-a-cul or sealed container	Fungal susceptibilities are not included in testing fee. Please call laboratory with questions.
Dermatophyte	10-12 hairs or skin scraping from border of lesion		Clean paper envelop/pill packet, etc.	Dermatophyte plates can be obtained from the laboratory for direct inoculation
Yeast culture	fresh tissue, body fluid, swab		Port-a-cul; plastic sealed container; Amies transport media	Susceptibility testing is not included in the testing fee. Please inquire if susceptibility testing is needed
Parasitology Tests	Specimens:	Sample volume required:	Collection container:	Additional information:
Fecal Float	feces	2 g	Clean, plastic, sealed container	
Fecal Sedimentation	feces	2 g	Clean, plastic, sealed container	
Fecal Quantitative McMasters	feces	2 g	Clean, plastic, sealed container	
Fecal Baermann	feces	2 g	Clean, plastic, sealed container	
Fecal Occult Blood	feces	2 g	Clean, plastic, sealed container	
Giardia Antigen	feces	2 g	Clean, plastic, sealed container	

Virology Tests	Specimens:	Sample volume required:	Collection container:	Additional information:
Canine Distemper IgG/IgM	serum	100uL	2 ml microcentrifuge tube	
Canine Distemper Vaccine Titer	serum	100uL	2 ml microcentrifuge tube	
Canine Parvo IgG/IgM	serum	100uL	2 ml microcentrifuge tube	
Canine Parvo Virus Vaccine Titer	serum	100uL	2 ml microcentrifuge tube	
Equine Herpesvirus titer	serum	100uL	2 ml microcentrifuge tube	
Equine Viral Arteritis titer	serum	100uL	2 ml microcentrifuge tube	
Feline Infectious Peritonitis Titer	serum	100uL	2 ml microcentrifuge tube	
Feline Virus Isolation (Calicivirus-Herpesvirus)	oral or nasopharyngeal swab	1 swab required	2 ml snap cap tube with NCSU-specific transport media	Call Laboratory for specific media
Turkey Coronavirus ELISA	serum	100uL	2 ml microcentrifuge tube	
Molecular Tests	Specimens:	Sample volume required:	Collection container:	Additional information:
Canine Distemper Virus PCR	conjunctival epithelium, buffy coat, fresh autopsy tissue	2 swabs (add sterile saline if shipped overnight) 2mLs of EDTA	slides or microcentrifuge tube	
Canine Influenza RT-PCR	oral or nasopharyngeal swab	2 swabs (add sterile saline if shipped overnight)	submit in red top tube	
Herpesvirus PCR -Canine, Feline, Equine 1&4	nasopharyngeal swab	2 swabs (add sterile saline if shipped overnight)	submit in red top tube	Call lab prior to submission
Feline Calicivirus PCR	oral swab	2 swabs (add sterile saline if shipped overnight)	submit in red top tube	
Feline Infectious Peritonitis Virus PCR	pleural effusion or EDTA blood	2mL of pleural effusion 2mL EDTA blood	no additive tube for effusion LTT for EDTA blood	
Feline Infectious Peritonitis Virus PCR + Rivalta	pleural effusion	2mL of pleural effusion	no additive tube	
Feline Leukemia Virus PCR	bone marrow aspirate/fluid/core	500ul	slides or microcentrifuge tube	
Leptospira serology + PCR	serum + urine aqueous humor or EDTA blood	1mL (serum) + 2mL (urine) 200uL aq humor 200uL EDTA blood	no additive tube for urine/aq hum red top blood collection tube	
Mycoplasma MS/MG PCR M.gallisepticum, M. synoviae Avian only	tracheal swab	Call laboratory with questions	Copan flocked swab preferred. Fisher Finest transport swab acceptable	
Chicken Proventricular Necrosis Virus (CPNV) RT-PCR	feces, frozen or FFPE proventricular tissue slides	200ul fecal sample, 2 FFPE proventricular tissue slides	microcentrifuge tube (feces) Slide transport container	Call lab prior to submission, if formalin fixed tissue submitted (not on slides) there will be additional charges to process tissue to paraffin blocks and slides cut
Chicken Infectious Laryngotracheitis Virus (ILT) PCR	tracheal/conjunctival swab sample/tissue impression on FTA card	2 tracheal or conjunctival swabs or 1 saturated FTA sample circle per sample	red top tube for swabs slide transport container	