

TESTS BY PATHOLOGY

Ruminants

Method		Matrix
Anaplasmosis (<i>Anaplasma phagocytophilum</i> and <i>A. marginale</i>) (see abortive or vector-borne diseases packages)		
PCR	Individual	Whole blood
Babesiosis (<i>Babesia</i> spp. / <i>Theileria</i> spp.) (see vector-borne diseases packages)		
PCR	Individual	Whole blood
Besnoitiosis (<i>Besnoitia besnoiti</i>)		
Ⓢ	Individual	Serum
ELISA	Pool - 10 samples maximum	
PCR	Individual	Whole blood
BHV4 - Bovine herpes virus 4		
ELISA	Antibody - Individual	Serum
Analysis outsourced to an external laboratory		
PCR	Virus - Individual	Cervical smear, aborted fetus, lung
Blue tongue (BTV) Antibodies		
Ⓢ	Individual	Serum
ELISA	From 1 to 9 samples	
Ⓢ	Individual	Serum
ELISA	Starting with 10 samples	
Blue tongue (BTV)		
PCR	Individual on organs (Preparation and extraction included)	Organ
Ⓢ	Individual - Clinical suspicion	Whole blood
Ⓢ	Individual (1 to 20 samples)	Whole blood
Ⓢ	Individual (21 to 199 samples)	
Ⓢ	Individual (from 200 samples)	Whole blood
Ⓢ	Typing of BTV-8 strain - Individual	
Ⓢ	PCR	Whole blood
Ⓢ	Typing of BTV-4 strain - Individual	
Ⓢ	Typing of BTV-4 & BTV-8 strain - Individual	Whole blood
Bovine Coronavirus (see respiratory or neonatal pathologies packages)		
Brucella Antibodies		
Ⓢ	Individual	Serum
Ⓢ	Prophylaxis introduction and control	
Ⓢ	RBT	
Ⓢ	Individual	
Ⓢ	Annual prophylaxis for sheep and goats	Serum
Ⓢ	Individual	
Ⓢ	Annual bovine prophylaxis	Serum
Ⓢ	Individual	
Ⓢ	FI ISA	Serum

©	ELISA	Pool - 10 samples maximum		
	Complement fixation test	Individual		
Analyses outsourced to an external laboratory accredited by COFRAC. Accreditation n° 1-1198. Scope available at www.cofrac.fr/en				
Brucella ovis Antibodies				
	ELISA	Individual 1 to 9 samples	Serum	
		Individual From 10 samples		
BVD - BDV Antibodies (Anti p80/ NS2-3 + total antibodies)				
©	ELISA	Individual 1 to 9 samples	Serum	
©		Individual From 10 samples		
©		Pool - 10 samples maximum		
BVD - BDV (Virus)				
©	PCR	Individual diagnosis	Serum	
©		Retest following a positive result		
©	PCR	Inter-herd pool of 10 samples maximum, with individual reanalysis from positive pools (purchases, sales, competitions, etc.)		
©		Intra-herd pool of 10 samples maximum, with individual reanalysis of positive pools (sanitation, operator's request)		
	PCR	Individual		Organ, TTW, BAL, NPS, milk, spleen of the fetus
©	PCR	Pool of 10 samples with individual reanalysis from positive pools		Biopsy of ear
©	ELISA	ELISA E0 Individual test		Serum
CAEV Antibodies				
©	ELISA	Individual 1 to 9 samples	Serum	
©		Individual From 10 samples		
Campylobacter fetus				
	PCR	Individual	Cervical or preputial smear	
Chlamydiaceae and Chlamydia abortus				
	ELISA	Chlamydiaceae (<i>Chlamydia</i> spp.)	Serum	
	PCR	Chlamydiaceae (<i>Chlamydia</i> spp.)	Cervical smear, Aborted fetus, milk	
	PCR	<i>Chlamydia abortus</i>	Aborted fetus, milk	
©	PCR	<i>Chlamydia abortus</i>	Cervical smear	
Cryptosporidium parvum (see neonatal pathologies packages)				
E. coli (Escherichia coli)				
	Culture	<i>E.coli</i> enumeration	Feces	
		Screening for <i>E.coli</i>		
		Identification of <i>E.coli</i>		
		Screening for <i>E.coli</i> + identification + serotyping		
		Serotyping of strain of <i>E.coli</i>	Strain	

Enzootic Bovine Leukosis - Antibodies			
©	ELISA	Individual Prophylaxis or control analyses	Serum
©	ELISA	Pool of maximum 10 sera Annual prophylaxis	
Giardia intestinalis			
	IC	Individual	Feces
Histophilus somni (see respiratory pathologies packages)			
Hypodermosis Antibodies			
©	ELISA	Individual	Serum
©		Pool - maximum 10 samples	
IBR - BHV-1 Antibodies			
©	ELISA	Individual - total antibodies	Serum
©		Individual - anti-gB antibodies	
©		Individual - anti-gE antibodies	
©		Pool of maximum 10 sera - total antibodies	
©		Pool of maximum 10 sera - total antibodies Annual prophylaxy	
IBR - BHV-1 Virus (see respiratory pathologies packages)			
	PCR	Individual	Organs
Influenza D (see respiratory pathologies packages)			
Leptospirosis			
	MAT	Individual Detection of antibodies	Serum
	PCR	Detection of pathogenic bacteria	Cervical smear, organs, whole blood, liver, spleen, kidney

Listeriosis			
Culture	Screening for <i>Listeria</i>	Organ	
	Identification of <i>Listeria</i>	Strain	
Liver fluke (<i>Fasciola hepatica</i>)			
ELISA	Individual (Idexx Kit)	Serum	
	Pool of up to 10 sera (Idexx kit)	Serum	
	Individual (Svanova kit)	Serum, milk	
	Pool of up to 10 sera (Svanova kit)	Serum	
	Bulk tank milk (Svanova kit)	Milk	
Malignant Catharrhal Fever (OHV-2)			
PCR	Individual	Whole blood	
Maedi-Visna Antibodies			
ELISA	Individual 1 to 9 samples	Serum	
	Individual From 10 samples		
	Pool of a maximum 5 sera 1 to 9 samples		
	Pool of maximum 5 sera From 10 samples		
<i>Mannheimia haemolytica</i> (see respiratory pathologies packages)			
Mycoplasmosis			
Culture	Screening for <i>Mycoplasma</i> by culturing (small ruminants) (Preparation and enrichment included)	Organ	
<i>Mycoplasma agalactiae</i>			
ELISA	Individual	Serum	
<i>Mycoplasma bovis</i> (see respiratory pathologies packages)			
PCR	Individual on a suitable matrix	Smear, lung, milk	
ELISA	Individual	Serum	
<i>Mycoplasma wenyonii</i> (see vector-borne pathologies packages)			
PCR	Individual on appropriate matrix	Whole blood	
<i>Neospora caninum</i> (see abortive pathologies packages)			
ELISA	Antibody - Individual	Serum	
PCR	Parasite - Individual	Brain	
<i>Ostertagia ostertagi</i>			
ELISA	ODR Serology	Milk	
ELISA	ODR Individual Serology	Serum	
Paratuberculosis			
©	PCR	Individual (on feces)	Feces
©	ELISA	Antibodies - Individual	Serum
<i>Pasteurella multocida</i> (see respiratory pathologies packages)			
PI3 (see respiratory pathologies packages)			
ELISA	Antibody - Individual	Serum	
Pregnancy Test			
	Individual 1 to 9 samples		

ELISA	Individual 10 to 49 samples		Serum
	Individual From 50 samples		
Q Fever (<i>Coxiella burnetii</i>) Antibodies			
ELISA	Individual		Serum
Q Fever (<i>Coxiella burnetii</i>) (see abortive pathologies packages)			
©	PCR	Semi-quantitative screening	Cervico-vaginal swab
	PCR	Semi-quantitative screening	Gastric content, milk
RSV (see respiratory pathologies packages)			
ELISA	Antibody - Individual		Serum
Salmonellosis			
©		Culture and screening in mammals	Feces, organ
		OR	
©	Culture	Screening with pre-enriched culture in mammals	
©		Identification and serotyping in mammals	
Salmonella Abortusovis			
©	Sero-agglutination	Salmonella abortus ovis	Serum
SBV Antibodies			
ELISA	Individual 1 to 9 samples		Serum
	Individual From 10 samples		

SBV Virus		
RT-PCR	Individual on an organ	Organ
	Individual on blood	Whole blood

Toxoplasmosis		
ELISA	Antibodies - Individual	Serum
PCR	Parasite - Individual	Cervical smear, brain

TESTS BY PATHOLOGY

Poultry

<i>Method</i>		<i>Matrix</i>
Salmonellosis		
©	Screening for <i>Salmonella</i> - Laying hens	Environmental samples
Culture	Screening for <i>Salmonella</i> - Broilers	
Culture	Identification and serotyping according to regulations	Strain
Culture	Screening with pre-enrichment - birds	Feces, organs
Avian influenza		
©	PCR Screening for avian influenza (bird flu) M gene and H5/H7 genes on pooled swabs	Tracheal and/or cloacal
PCR	Screening for avian influenza (bird flu) M gene and H5/H7 genes on wipes and boot swabs	Swab cloths

TESTS BY PATHOLOGY

Swine

Method		Matrix
Actinobacillus pleuropneumoniae (APP)		
ELISA	Antibody - Individual	Serum
African Swine fever		
ELISA	Antibodies - Individual	Serum
Aujeszky Disease (Pseudorabies)		
PCR	Screening for the Aujeszky disease virus	Serum
Ⓒ	ELISA Individual - Antibodies (anti-gB)	
Ⓒ	ELISA Individual - Antibodies (anti-gE)	
Brachyspira hyodysenteriae		
PCR	Screening for <i>Brachyspira hyodysenteriae</i>	Feces
Culture	Screening for <i>Brachyspira hyodysenteriae</i>	
Brucellosis		
Ⓒ	EAT Screening for Brucellosis - Individual	Serum
Ⓒ	ELISA Screening for Brucellosis - Individual	
Ⓒ	Sero-agglutination (SAW) Screening for Brucellosis - Individual	Serum
Chlamydiosis		
ELISA	Screening for Chlamydiosis	Serum
Circovirus type II		
ELISA	Antibodies - Individual	Serum
Classical Swine Fever		
PCR	Screening for Classical Swine Fever virus	Organs
Ⓒ	ELISA Antibodies - Individual	Serum
Foot and mouth disease		
ELISA	Antibodies - Individual	Serum
Influenza A (H1N1) 2009		
Ⓒ	PCR Screening for Influenza A (H1N1) 2009	Nasal Swab
	ELISA Antibodies - Individual	Serum
Lawsonia intracellularis		
PCR	Screening for <i>Lawsonia intracellularis</i> (including extraction)	Feces
Leptospirosis		
MAT	Individual (S) Detection of antibodies	Serum
PCR	Screening for <i>Leptospira</i> spp.	Serum - Urine

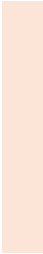
<i>Mycoplasma hyopneumoniae</i>		
PCR	Screening for <i>Mycoplasma hyopneumoniae</i>	Nasal or tracheal smear - Broncho-alveolar lavage
ELISA	Antibodies - Individual	Serum
<i>Mycoplasma spp.</i>		
PCR	Screening for <i>Mycoplasma spp.</i>	Nasal or tracheal smear - Broncho-alveolar lavage
Parvovirus		
PCR	Screening for Parvovirus	Organs
ELISA	Antibody - Individual	Serum
<i>Pasteurella multocida</i> toxin		
PCR	Screening for <i>Pasteurella multocida</i> toxin	Culture - Nasal swab
ELISA	Antibodies - Individual	Serum
Porcine Deltacoronavirus (PDCoV)		
PCR	Screening for Porcine Deltacoronavirus (PDCoV)	Feces
Porcine epidemic diarrhoea (PED)		
PCR	Screening for Porcine Epidemic Diarrhoea (PED) virus	Feces
ELISA	Antibodies - Individual	Serum
Porcine Respiratory Coronavirus (PRCV)		
ELISA	Antibodies - Individual	Serum
Porcine Scabies		
ELISA	Antibodies - Individual	Serum
PRRS		
© PCR	Screening for PRRS (Porcine Reproductive and Respiratory Syndrome) virus	Serum
© ELISA	Antibodies - Individual	
Salmonellosis		
PCR	Screening for <i>Salmonella</i> Typhimurium	Organs
ELISA	Antibodies - Individual	Serum
Spirochetes package (<i>Brachyspira hyodysenteriae</i> + <i>Lawsonia intracellularis</i>)		
PCR	Screening for <i>Brachyspira hyodysenteriae</i> + <i>Lawsonia intracellularis</i>	Feces
Swine Erysipelas		
ELISA	Antibodies - Individual	Serum
Toxoplasmosis		
ELISA	Antibodies - Individual	Serum
Transmissible Gastroenteritis (TGEV)		

ELISA	Antibodies - Individual	Serum
Vesicular disease		
ELISA	Antibodies - Individual	Serum

ABORTIVE PATHOLOGIES		
PCR	Screening for <i>Coxiella burnetii</i> (semi-quantitative test) and <i>Chlamydia abortus</i> Individual - Bovine or small ruminant	Cervical smear, aborted fetus, milk
PCR	Screening for <i>Coxiella burnetii</i> (semi-quantitative test) and <i>Chlamydia abortus</i> Pool of maximum of 3 - Small ruminants only	
PCR	Package 2 analyses: Screening for <i>Anaplasma phagocytophilum</i> (Ehrlichiosis) and <i>Anaplasma marginale</i> (Anaplasmosis)	Whole blood from the aborted female
PCR	Package 2 analyses per matrix: Screening for FCO and BVD (4 PCR)	Spleen from fetus and whole blood from the aborted female
PCR + ELISA	Package for 6 pathogens: PCR <i>Anaplasma phagocytophilum</i> and <i>A. marginale</i> / PCR Q Fever / PCR <i>Listeria monocytogenes</i> / PCR <i>Salmonella</i> sp. / Serology for <i>Neospora caninum</i>	Whole blood, smear, serum
PCR + ELISA	Package for 7 pathogens: PCR <i>Anaplasma phagocytophilum</i> and <i>A. marginale</i> / PCR Q Fever / PCR <i>Listeria monocytogenes</i> / PCR <i>Salmonella</i> spp. / Serology for <i>Neospora caninum</i> / PCR BVD	Whole blood, smear, serum, spleen from aborted fetus
PCR + ELISA	Package for 8 pathogens: PCR <i>Anaplasma phagocytophilum</i> and <i>A. marginale</i> / PCR Q Fever / PCR <i>Listeria monocytogenes</i> / PCR <i>Salmonella</i> spp. / Serology for <i>Neospora caninum</i> / PCR BVD / PCR FCO	Whole blood, smear, serum, spleen from aborted fetus
PCR	Package <i>Salmonella</i> and <i>Listeria</i> - Individual	Organ or smear
PCR	Screening for <i>Listeria</i> - individual (Preparation and extraction included)	Organ or smear

NEONATAL PATHOLOGIES		Matrix
PCR	Rotavirus and Coronavirus - Individual	Feces
PCR - ELISA - Culture	Rotavirus and Coronavirus (PCR) + Cryptosporidiae (ELISA) + typing of <i>E.coli</i>	
PCR + ELISA + Culture	Rotavirus and Coronavirus (PCR) + Cryptosporidiae (ELISA) + typing of <i>E.coli</i> + <i>Salmonella</i>	
ELISA	Rotavirus, Coronavirus, <i>E.coli</i> and Cryptosporidiae	
Radial Immuno Diffusion (RID)	Quantitative determination of IgG1 1 serum or 1 sample of colostrum	Serum Colostrum
	Quantitative determination of IgG1 Pack of 2 to 5 samples (colostrums and/or sera)	
	Quantitative determination of IgG1 Pack of 6 to 10 samples (colostrums and/or sera)	

RESPIRATORY PATHOLOGIES		Matrix
PCR	RSV and PI3 Individual analysis	Preferably: Lung, tracheal aspiration fluid for broncho-alveolar lavage Possibly: Deep
	Bovine coronavirus and Influenza D Individual analysis	
	<i>Pasteurella multocida</i> and <i>Mannheimia haemolytica</i> Individual analysis	
	<i>Mycoplasma bovis</i> and <i>Histophilus somni</i> Individual analysis	
	6 pathogens package RSV / PI3 / <i>Pasteurella multocida</i> / <i>Mannheimia haemolytica</i> / <i>Histophilus somni</i> / <i>Mycoplasma bovis</i>	



<p>8 pathogens package RSV / PI3 / <i>Pasteurella multocida</i> / <i>Mannheimia haemolytica</i> / <i>Histophilus somni</i> / <i>Mycoplasma bovis</i> / Coronavirus / Influenza D</p>	nasopharyngeal swab
<p>10 pathogens package RSV / PI3 / <i>Pasteurella multocida</i> / <i>Mannheimia haemolytica</i> / <i>Histophilus somni</i> / <i>Mycoplasma bovis</i> / Coronavirus / Influenza D / BVD / BHV-1</p>	

VECTOR-BORNE PATHOLOGIES		Matrix
PCR	<i>Anaplasma phagocytophilum</i> and <i>A. marginale</i> Individual test	Whole blood
	<i>Babesia</i> spp. and <i>Theileria</i> spp. Individual test	
	<i>Mycoplasma wenyonii</i> Individual test	
	Package of 2 PCR of choice	
	Package of 3 PCR	

CONTROL ANALYSIS

EXPORT FEES (individual analyses)

Method		Matrix
©	Total antibodies IBR and Brucellosis 50 to 199 samples	Serum
©	Total antibodies IBR and Brucellosis From 200 samples	
©	Total antibodies IBR Brucellosis and Leucosis 50 to 199 samples	
©	Total antibodies IBR Brucellosis and Leucosis From 200 samples	
©	BTV PCR Total antibodies ELISA IBR and Brucellosis 50 to 199 samples	Serum and whole blood
©	BTV PCR Total antibody ELISA IBR and Brucellosis From 200 samples	
©	BTV PCR Total antibodies ELISA IBR, Brucellosis and Leucosis 50 to 199 samples	
©	BTV PCR Total antibodies ELISA IBR, Brucellosis and Leucosis From 200 samples	
	BTV and SBV PCR Total antibodies ELISA IBR, Brucellosis and Leucosis 50 to 199 samples	
	BTV and SBV PCR Total antibodies ELISA IBR, Brucellosis and Leucosis From 200 samples	

PACKAGES IN CASE OF ANIMAL MOVEMENTS

©	Inter-herd pool BVD PCR and individual Besnoitiosis ELISA test	Serum
©	PCR and ELISA Inter-herd pool BVD PCR and individual Besnoitiosis - Paratuberculosis ELISA test	
	Inter-herd pool BVD PCR and individual Besnoitiosis - Paratuberculosis - Neosporosis ELISA test	
ELISA	IBR individual test - BVD E0 ELISA individual test - ELISA Besnoitiosis individual test	

ANIMAL HEALTH ANALYSES

Matrix

Method

Matrix

NECROPSY		
Euthanasia for necropsy purposes (mammals)		Animal
Necropsy of small poultry (chicks)		Batch of animals
Necropsy of small animals (< 2 Kg)		Animal
Necropsy of animals <30kg		
Necropsy of a deer		
Necropsy of an animal between 30 and 80 kg		
Parasitic examination of an organ		
Craniotomy for harvesting brain tissue - Depending on size		
Preparation of samples for rabies testing - Depending on size		
Necropsy - Expertise (hour)		

PARASITOLOGY		
Preparation	Pool of up to 5 feces	Feces
Observation	Quantitative or qualitative coproscopy using zinc sulfate flotation	
	Parasitic examination of organs	Organs
Baermann technique	Screening for lungworm larvae	Feces
Potassium hydroxide wet mount preparation	Screening for external parasites	Cutaneous sample
Observation	Identification of external parasites	
Serology	Quantitative determination in serum - Individual test	Serum
Serology	Quantitative determination in serum - Pool of up to 5 sera	
ELISA or observation	Screening for Cryptosporidia by ELISA or parasitological method	Feces
Observation	Direct research in crystalline lens	Sample

GENERAL BACTERIOLOGY		Matrix
Culture	Screening for aerobic - anaerobic bacteria	Sample
Simple identification	Gram staining + biochemical test (Enterobacteriaceae...)	Strain
Complex identification	Gram staining + biochemical test (Staphylococci, Streptococci, Pasteurellaceae, Corynebacterium...)	
Ziehl stain	Screening for acid fast bacilli	Organs
	Gram staining	
©* Disk diffusion method	Antibiotic susceptibility testing Maximum of 16 antibiotics tested	Strain

MYCOLOGY		Matrix
Direct examination	Screening for Dermatophytes fungi	Skin sample
Culture	Screening for Dermatophytes fungi	
Observation	Identification of Dermatophytes fungi	Skin sample
Culture	Screening for yeast / molds	Appropriate matrix
Observation	Identification of yeasts / molds	

ANAEROBIC BACTERIA		Matrix
Culture	Screening for anaerobic bacteria	Organ
	Anaerobic bacteria count in intestinal content	Feces
Biochemical tests	Identification of anaerobic bacteria	Strain

MOLECULAR BIOLOGY		Matrix
PCR	Screening for microbial agents by simplex or multiplex real-time PCR by individual test analysis in blood (including extraction)	Blood
	Screening for microbial agents by simplex or multiplex real-time PCR by individual analysis in an organ (including extraction)	Organs
	Screening for microbial agents by simplex or multiplex PCR by individual analysis in blood pooled samples (including extraction)	Blood
	Screening for microbial agents by simplex or multiplex PCR by analysis on a pool of organs (including extraction)	Organs

STORAGE - PREPARATION
Strain conservation on agar medium
Strain preservation at - 20° C
Strain preservation at - 80° C
Recovery of serum from serum bank
Preparation, centrifugation and storage of serum at -20°C
Preparation, separation of blood cells and storage at -80°C
Sample management and conservation fee (excluding prophylaxis)
Sample management and conservation fee (prophylaxis)
Preparation of a pool of up to 5 sera
Preparation of a pool of up to 10 sera
Preparation of a pool (other than serum)
Sample preparation-extraction for bacteriological, virological or PCR screening in animal health
Abortive Brucellosis Surveillance: Supply of a sampling kit and transport box, preparation and storage of a swab.

MISCELLANEOUS FEES

ADMINISTRATIVE FEES

Administrative fees

TRANSFER OF SAMPLES

Preparation and shipping of a sample or 1 to 10 sera

Preparation of 2 to 5 samples or more than 10 sera

Preparation and shipment of a sample to an external laboratory by express transport

Transport of samples by ADR 6.2.3-approved special carrier

SUPPLY OF MATERIAL

Supply of 1 batch of 100 (test tubes + needles)

Supply of a sterile container for samples - small model

Supply of a sterile container for samples - intermediate model

Supply of transport boxes for special samples

COLLECTION OF SAMPLES

Transport of samples by Agrivalys71 upon request

Regular collection of samples - 1 to 5 test tubes

Regular collection of samples - 6 to 10 test tubes

Regular collection of samples - more than 10 test tubes or other samples

© Cofrac accredited parameter. Accreditation no. 1-6486 for testing and analysis programs in animal immuno-serology (LAB GTA 27), molecular biology in animal health (BIOMOLSA) and animal bacteriology (LAB GTA 36). Scope available at www.cofrac.fr/en

* For strains not present in the reference databases, Agrivalys 71 can issue analysis reports without the COFRAC logo which therefore are not presumed to be compliant with the accreditation reference (GEN REF 11 §7.2).

S Without any clarification from the client, serovars will be chosen according to the species and epidemiological context in France.

