

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
	Starting with 10 samples	
Blue tongue (BTV)		
PCR	Individual on organs (Preparation and extraction included)	Organ
Ⓒ	PCR	Individual - Clinical suspicion
Ⓒ		Individual (1 to 20 samples)
Ⓒ	PCR	Individual (21 to 199 samples)
Ⓒ		Individual (from 200 samples)
Ⓒ		Typing of BTV-8 strain - Individual
Ⓒ	PCR	Typing of BTV-4 strain - Individual
Ⓒ		Typing of BTV-4 & BTV-8 strain - Individual
Bovine Coronavirus (see respiratory or neonatal pathologies packages)		
Brucella Antibodies		
Ⓒ		Serum
	Individual Prophylaxis introduction and control	
Ⓒ	RBT	
	Individual Annual prophylaxis for sheep and goats	
Ⓒ		Serum
	Individual Annual bovine prophylaxis	
Ⓒ	ELISA	Individual

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 (Chlamydia spp.)	Serum
	PCR	Chlamydiaceae (Chlamydia spp.)	Cervical smear, Aborted fetus, milk
	PCR	Chlamydia abortus	Aborted fetus, milk
©	PCR	Chlamydia abortus	Cervical smear
Cryptosporidium parvum (see neonatal pathologies packages)			
E. coli (Escherichia coli)			
Culture	E.coli enumeration	Feces	
	Screening for E.coli		
	Identification of E.coli		
	Screening for E.coli + identification + serotyping		
	Serotyping of strain of E.coli	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 prophylaxis	
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		
Mannheimia haemolytica (see respiratory pathologies packages)			
Mycoplasmosis			
Culture	Screening for <i>Mycoplasma</i> by culturing (small ruminants) (Preparation and enrichment included)		Organ
Mycoplasma agalactiae			
ELISA	Individual		Serum
Mycoplasma bovis (see respiratory pathologies packages)			
PCR	Individual on a suitable matrix		Smear, lung, milk
ELISA	Individual		Serum
Mycoplasma wenyonii (see vector-borne pathologies packages)			
PCR	Individual on appropriate matrix		Whole blood
Neospora caninum (see abortive pathologies packages)			
ELISA	Antibody - Individual		Serum
PCR	Parasite - Individual		Brain
Ostertagia ostertagi			
ELISA	ODR Serology		Milk
ELISA	ODR Individual Serology		Serum
Paratuberculosis			
©	PCR	Individual (on feces)	Feces
©	ELISA	Antibodies - Individual	Serum
Pasteurella multocida (see respiratory pathologies packages)			
PI3 (see respiratory pathologies packages)			
ELISA	Antibody - Individual		Serum
Pregnancy Test			
	Individual 1 to 9 samples		

ELISA	Individual	Serum	
	10 to 49 samples		
	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	Culture and screening in mammals	Feces, organ
		OR	
Ⓒ		Screening with pre-enriched culture in mammals	
Ⓒ		Identification and serotyping in mammals	
Salmonella Abortusovis			
Ⓒ	Sero-agglutination	Salmonella abortus ovis	Serum
SBV Antibodies			
ELISA	Individual	Serum	
	1 to 9 samples		
	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

Method			Matrix
Salmonellosis			
©	Culture	Screening for <i>Salmonella</i> - Laying hens	Environmental samples
©		Screening for <i>Salmonella</i> - Broilers	
	PCR	Screening for Salmonellosis	Swab cloths Swabs
	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 Brachyspira hyodysenteriae		Feces
Culture	Screening for Brachyspira hyodysenteriae		
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 Lawsonia intracellularis (including extraction)		Feces
Leptospirosis			
PCR	Screening for Leptospira spp.		Serum - Urine

Mycoplasma hyopneumoniae			
PCR	Screening for <i>Mycoplasma hyopneumoniae</i>		Nasal or tracheal smear - Broncho-alveolar lavage
ELISA	Antibodies - Individual		Serum
Mycoplasma spp.			
PCR	Screening for <i>Mycoplasma</i> spp.		Nasal or tracheal smear - Broncho-alveolar lavage
Parvovirus			
PCR	Screening for Parvovirus		Organs
ELISA	Antibody - Individual		Serum
Pasteurella multocida 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
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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>	

	8 pathogens package RSV / PI3 / <i>Pasteurella multocida</i> / <i>Mannheimia haemolytica</i> / <i>Histophilus somni</i> / <i>Mycoplasma bovis</i> / Coronavirus / Influenza D	nasopharyngeal swab
	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	

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
©	ELISA	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	
©	PCR and ELISA	BTV PCR Total antibodies ELISA IBR and Brucellosis 50 to 199 samples	Serum <u>and</u> 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			
©	PCR and ELISA	Inter-herd pool BVD PCR and individual Besnoitiosis ELISA test	Serum
©		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	
Baermann technique	Screening for lungworm larvae	Feces
Potassium hydroxide wet mount preparation	Screening for external parasites	Cutaneous sample
Observation	Identification of external parasites	Serum
Serology	Quantitative determination in serum - Individual test	
Serology	Quantitative determination in serum - Pool of up to 5 sera	Feces
ELISA or observation	Screening for Cryptosporidiae by ELISA or parasitological method	
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	Strain
©* Disk diffusion method	Antibiotic susceptibility testing Maximum of 16 antibiotics tested	

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

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* Agrivalys 71 can issue analysis reports without the COFRAC logo for strains not covered by the standards.