

## To reach us

### **Biovet has 2 laboratories in Quebec**

Saint-Hyacinthe and Quebec City

We have the largest customized pickup network providing the transport of samples in Quebec. even in rural areas.

### Ask for a pick up or contact Customer Service

Phone: 450 771-7291 or 1-888-824-6838

Email: sac@biovet-inc.com

Fax: 450 771-4158

Address: 4375. av. Beaudry. Saint-Hyacinthe QC J2S 8W2 (Head office) | 945. av. Newton. Local 126-127. Québec QC G1P 4M3

#### **Opening Hours**

	Saint-Hyacinthe	Quebec City
Lundi au vendredi :	8:00 AM to 9:00 PM	12:30 PM to 21:00 PM
Samedi :	8:30 AM to 2:00 PM	CLOSED
Dimanche:	CLOSED	CLOSED

## **About Biovet**

Biovet offers a full range of veterinary diagnostic services including hematology. biochemistry. microbiology. serology. molecular biology. endocrinology. coagulation and cytology. The analyses are performed on site by qualified technical personnel under the supervision of microbiologists and clinical pathologists certified by the American College of Veterinary Pathologists.

Our primary goal is to provide reliable analysis results in the shortest possible time. To this end. Biovet has set up an efficient and personalized sample collection system that makes it possible to reach a large number of veterinary clinics in Quebec. Your samples are analyzed upon receipt. and the results are transmitted to you by the method of your choice through the implementation of a computerized analysis management system. The Biovet laboratory also runs several internal and external quality controls, which ensure the accuracy of the results.

Biovet is proud to provide you with online access to your results. With Bionet, you can have fast, free and real-time access to your result reports, anytime, anywhere with an internet connection. For more information on the Bionet service, you can contact us at bionet@biovet-inc.com or call us at 1-888-824-6838. You can also visit us online at: www.biovet.ca/bionet.

Animal health is important to us. which is why Biovet specialists (clinical pathologists and microbiologists) are available to answer your questions. Whether it's determining the best test to diagnose a given condition or interpreting the results. our team is here to assist you.

This User's Guide contains information that is useful when dealing with Biovet. We are proud to be associated with your practice and we work continually on improving our services so that we may always better meet your needs.

The Team at Biovet

## **Table of contents**

2	To Reach Us
2	About Biovet
5	Legend
6	Sampling material
8	Swine - Tests offered
8	Actinobacillus pleuropneumoniae
9	E. Coli
9	Glaesserella (Haemophilus) parasuis
9	Histopathology
9	Influenza
10	Lawsonia
10	Microbiology (Swine)
11	Mycoplasmas
11	Parasitology
11	PCV2 - PCV3
11	PRRSV
12	qPCR Profiles
12	Rotavirus
13	Salmonella

13	Seneca Valley Virus (SVA)
13	Serology – Multiplex
13	Serotyping And Genotyping
14	TGEV - PRCV - PEDV - PoDCV
14	Miscellaneous Viruses
14	Other Bacteria
15	Other Services. Fees
16	Poultry - Tests offered
16	Microbiology (Poultry)
16	Parasitology (Poultry)
17	PCR (Poultry)
17	Serology (Poultry)
17	Other Services. Fees (Poultry)
18	Appendix A – Guidelines for storing and shipping samples to the laboratory
19	Appendix B – Aerobic or anaerobic culture: how to choose?
20	Appendix C – List of antibiotics (sensitivity)
21	Appendix - Protocol for the Handling and Sending of Large Masses



# Biovet is becoming $\mathbf{ANTECH}^{\mathsf{m}}$

We're pleased to share that Biovet will become ANTECH™ in 2025. meaning you'll soon have access to a wider portfolio that includes North America's largest reference laboratory network. best-in-class in-house diagnostics from Heska. the industry's most trusted imaging equipment from Sound™. and breakthrough telemedicine from AIS™.

Helping you navigate all of these new and exciting options will be the same Quebec team you've come to know and trust. They will continue providing you with unparalleled support via the same contact points you've always used.

antechdiagnostics.com 800-341-3440

## Legend

### **Samples**

See the sampling materials section below for the abbreviations of the various tubes and others

Variety of samples that will be detailed in the test description.

### **Turnaround Time (TAT)**

**(** Result on the day of receipt

D Day

### **Abbreviations**

₫	For analyzes done externally, it is best to contact us prior to submitting the sample to ensure availability of the test. Transport fee are excluded.
Ab	Antibody
ELISA	Enzyme-linked immunosorbent assay
НІ	Haemagglutination inhibition
MFIA	Multiplexed Fluorometric Immunoassay
*	New
PCR	Polymerase Chain Reaction
qPCR	Quantitative Polymerase Chain Reaction
	qualitative i orginorado entanticadados
TAT	TURNAROUND TIME

# **Sampling Material**

CODE		PKG	DESCRIPTION – TYPE OF SAMPLE
_			<b>IMPORTANT:</b> see Appendix A - Guidelines for storing and shipping samples to the laboratory.
TRD-328		10	Shipping bags for samples
	enst.		Description: Ziploc™ Shipping bags for samples. with pocket for request form
			Usage: IMPORTANT. USE ONLY ONE BAG OF SAMPLES PER REQUEST FORM
			You need shipping bags? Ask our delivery man.
TRD-319		1	Shipping Unit
			Description: 40-tube box for sampling
TRD-338		20	Polyfoam box
			Description: Polyfoam box for 2 or 4 sampling tubes
TRD-344		1	Sterile container. 60 ml. twist cap
			Description: sterile plastic container
	Agrana and an arrangement of the second		Usage: Aerobic or anaerobic culture.
			Comment: store samples between 4°C and 8°C.
TRD-325		1	Swab with AMIES transport medium
	Marrie 200		Description: Swab and tube with Amies transport medium with or without charcoal.
			Usage: Aerobic or anaerobic culture
			Comment: Keep the swab between 2 and 8 °C. Punch biopsy biopsies can be submitted on a swab in contact with the transport environment for a culture. Punch biopsies can be send on a swab in contact with the transport medium for culture. or in a red-top tube with a few drops of physiological water.
TRD-354		1	Sterile polyester swab (PCR)
	Guarante para Mila 1822 St.		Description: sterile polyester swab used ONLY for PCR analysis.
	The state of the s		Usage: PCR analyses (respiratory diseases)
			Procedure: once the sample has been taken. place the swab(s) in a sterile preservative-free tube (TRD-310).
			Comment: not suitable for aerobic or anaerobic culture EXCEPT if you add a few drops of physiological water to the tube.
			Store samples between 4°C and 8°C.
TRD-314		10	Slide holder
			Description: cytology slide holder.
			Comment: Please do NOT write anything on the blade holders. put your information on the label.
TRD-324		1	Container pre-filled with formalin (40 mL)
TRD-323		1	Container pre-filled with formalin (60 mL)
TRD-321		1	Container pre-filled with formalin (90 mL)
TRD-322		1	Container pre-filled with formalin (120 mL)

# **Sampling Material**

CODE		PKG	DESCRIPTION – TYPE OF SAMPLE
TRD-360			Container pre-filled with formalin (480 mL)  Description: The amount of formaldehyde in the specimen container is about half the volume of the container.
			Procedure: The volume of formaldehyde should be 10 times that of the tissue. See Appendix - Protocol for the Handling and Sending of Large Masses.
			Comment: contains 10% neutral buffered formalin.
TRD-351		100	Green tube (1.3 mL)
	P CONTEXTOR OF		Description: sampling tube with green cap containing heparin.
			- (PG) Heparinized plasma
			Procedure: Whole blood collected in a heparinized tube. stirred at least 10-20 times immediately after collection. Centrifuge and place plasma in glass or plastic tube. labelled "Heparinized Plasma").
TRD-352		100	Lavander tube (1.3 mL)
TRD-302		100	Lavander tube (3 mL)
TRD-303		100	Lavander tube (10 mL)
			Description : collection tube with lavender cap containing EDTA.
	_		- (L) EDTA Whole blood
	MARKE SHITS OF THE SHIP SHIP SHIP SHIP SHIP SHIP SHIP SHIP		Procedure: Whole blood collected in a tube containing an anticoagulant (EDTA-K2 or EDTA-K3). stirred at least 10-20 times immediately after collection. EDTA is bactericidal (so no blood culture or microbiological test can be added). Be careful to use the correct tube format. as there must be blood at least up to the label. If the anticoagulant/anticoagulant ratio is too high. the lab will note: Volume suboptimal; anticoagulant/blood ratio too high.
			<ul> <li>Other usages: For cytology of body fluids including thoracic. abdominal. synovial fluids. cystic or cavity fluids (except for urine cytology which must be submitted in a red cap tube or sterile Container).</li> </ul>
			Comment: store samples between 4°C and 8°C.
TRD-300		100	Red top tube (3 mL)
TRD-310	To the way	100	Red top tube (8 mL)
			Description: anticoagulant-free or additive-free sampling tube.
			- (S) Serum :
			Procedure: centrifuge it and send us the supernatant or wait and once the blood has coagulated. remove the supernatant from the clot.
			Comment: store samples between 4°C and 8°C.
TRD-355		10	PBS tube (15 mL)
			Description: tube with phosphate-buffered saline.
			Price available on request

## **Sampling Material**

CODE		PKG	DESCRIPTION – TYPE OF SAMPLE
TRD-374		1	Water sampling kit for Total C E. coli. entero. Profile  Description: bottles for water analysis  Comment: use the water analysis request form included in the kit or available on our website in the livestock animal section.
TRD-375		1	Water sampling kit for Total C E. coli. entero. AAHB Profile  Description: bottles for water analysis  Comment: use the water analysis request form included in the kit or available on our website in the livestock animal section.
TRD-376	The state of the s	1	Water sampling kit for Physico-chemical profile 3 - Complete analysis  Description: bottles for water analysis  Comment: use the water analysis request form included in the kit or available on our website in the livestock animal section.
TRD-377		1	Water sampling kit for Physico-chemical profile 4 – animal watering  Description: bottles for water analysis  Comment: use the water analysis request form included in the kit or available on our website in the livestock animal section.

## **Swine - Tests Offered**

ACTINOBACILLUS PLEUROPNEUMONIAE					
CODE	TEST NAME - DESCRIPTION	SAMPLE	TAT	PRICE	
DPOR-70013	APP 1-9-11 ab ELISA (GREMIP) ①* This test is done externally.	0.5 mL Serum <b>(S)</b>	2-5 D	\$15.70	
DPOR-70030	<b>APP 2 ab ELISA (GREMIP)</b> ①*  This test is done externally.	0.5 mL Serum <b>(S)</b>	2-5 D	\$15.70	
DPOR-70015	<b>APP 2-3-7 ab ELISA (GREMIP)</b> ①* This test is done externally.	0.5 mL Serum <b>(S)</b>	2-5 D	\$28.40	
DPOR-70027	<b>APP 3-6-8-15 ab ELISA (GREMIP)</b> ①* This test is done externally.	0.5 mL Serum <b>(S)</b>	2-5 D	\$15.70	
DPOR-70020	<b>APP 4-7 ab ELISA (GREMIP)</b> ①* This test is done externally.	0.5 mL Serum <b>(S)</b>	2-5 D	\$15.70	
DPOR-70014	APP 5 ab ELISA (GREMIP) ①* This test is done externally.	0.5 mL Serum <b>(S)</b>	2-5 D	\$15.70	
DPOR-70025	<b>APP 10 ab ELISA (GREMIP)</b> ①* This test is done externally.	0.5 mL Serum <b>(S)</b>	2-5 D	\$15.70	

ACTINOBACILLU	S PLEUROPNEUMONIAE			
CODE	TEST NAME - DESCRIPTION	SAMPLE	TAT	PRICE
DPOR-70026	APP 12 ab ELISA (GREMIP) <sup>₫</sup> *  This test is done externally.	0.5 mL Serum <b>(R)</b>	2-5 D	\$15.70
DPOR-70031	Multi APP ab ELISA (GREMIP) ⊕* This test is done externally.	0.5 mL Serum <b>(S)</b>	2-5 D	\$23.25
	App Serotyping. see Serotyping. Genotyping section			
	* Shipping fees included for those tests			

E. COLI				
CODE	TEST NAME - DESCRIPTION	SAMPLE	TAT	PRICE
DPOR-20013	E. coli F4. F5. F6. STa. STb. LT (neonatal) qPCR Pool of 5 max. This test is for the neonatal period and a cul- ture will be done previously.	Feces, intestinal contents	2-5 D	\$150.35
DPOR-20014	<b>E. coli F4. F18. STa. STb. LT. STx2e (Post-weaning) qPCR</b> Pool of 5 max. This test is for the neonatal period and a culture will be done previously.	Feces, intestinal contents	2-5 D	\$150.35

GLAESSERELLA (HAEMOPHILUS) PARASUIS					
CODE	TEST NAME - DESCRIPTION	SAMPLE	TAT	PRICE	
DPOR-40022	Glaesserella (H.) parasuis - Ab - ELISA	0.5 mL Serum <b>(S)</b>	2-3 D	\$13.80	
DPOR-40055	Glaesserella (H.) parasuis qPCR	Tissue, swab	1-2 D	\$33.55	
	Also available in profile. see qPCR PROFILES section				

HISTOPATHOLOG	e <b>y</b>			
CODE	TEST NAME - DESCRIPTION	SAMPLE	TAT	PRICE
DPOR-70040	Histopathology (1 tissue)  Place the sample in 10% formalin. The formalin volume should be at least 10 times that of the tissue. Use containers with a wide mouth. Hollow organs (e.g., intestines) should be open lengthwise before being placed in formalin to ensure good fixation of the mucosa.		8 D	\$88.70
DPOR-70034	Additional tissue (histopathology)			\$21.65
DPOR-70046	Immunohistochimy PCV 2   CA This test is done externally.	Tissue	1 W	U.R.

INFLUENZA				
CODE	TEST NAME - DESCRIPTION	SAMPLE	TAT	PRICE
DPOR-40020	Influenza H1 Ab - ELISA blocking	1.0 mL Serum <b>(S)</b>	2-3 D	\$13.25
DPOR-20004	Influenza H1 & H3N2 Ab - ELISA	1.0 mL Serum (S)	2-3 D	\$21.35
DPOR-40021	Influenza H3N2 Ab - ELISA	0.5 mL Serum <b>(S)</b>	2-3 D	\$13.80
DPOR-40125	Influenza type A Ab - ELISA	1.0 mL Serum (S)	2-3 D	\$13.25
DPOR-40138	Influenza Type A qPCR Also available in profile, see qPCR PROFILES section	Lung, nasal swab, oral fluids	1-2 D	\$42.75

INFLUENZA				
CODE	TEST NAME - DESCRIPTION	SAMPLE	TAT	PRICI
DPOR-40211	<b>Influenza typing H1. H3 qPCR</b> After positive Influenza Type A qPCR test.		1-2 D	\$80.00
DPOR-70102	Influenza HA Sequencing-Genotyping ©QC After positive PCR. This test is done externally.		10 D	\$194.70
DPOR-40136	Porcine Parainfluenza Virus-1 (PPIV-1) qPCR	Nasal swab, lung, trachea, oral fluids	2-3 D	\$41.40
LAWSONIA				
CODE	TEST NAME - DESCRIPTION	SAMPLE	TAT	PRICE
DPOR-40123	Lawsonia intracellularis Ab - ELISA	1.0 mL Serum <b>(S)</b> or Heparinized Plasma <b>(PG)</b>	2-3 D	\$15.10
DPOR-40149	<b>Lawsonia intracellularis - qPCR</b> Also available in profile. see qPCR profiles section	Feces, intestines	2-3 D	\$74.30
MICROBIOLOGY				
CODE	TEST NAME - DESCRIPTION	SAMPLE	TAT	PRICE
DPOR-40002	Aerobic culture  Refrigerate. sterile container or swab with solid transport medium. Refer to Appendix C. if you are hesitating between aerobic or anaerobic culture.	Tissue, swab, 500 µL urine, liquid, other	2-5 D	\$64.45
DPOR-40003	Anaerobic culture  sterile container as small as possible for the sample so that there is as little air as possible in the container. or swab with solid transport medium. DO NOT refrigerate; It is preferable that the sample be sent to the lab the same day. Anaerobic organisms are sensitive to cold. should be stored at room temperature and not in the fridge. Refer to Appendix B. if you are hesitating between aerobic or anaerobic culture.	Tissue, swab, 500 μL urine, liquid, other	2-5 D	\$96.50
DPOR-40001	Antimicrobial susceptibility * Culture must have been done previously. See Appendix C: antibiotic profile (sensitivity). * Kirby-Bauer method.	Isolate	2 D	\$27.90
DPOR-40120	Clostridium perfringens (culture)	Intestinal contents	2-3 D	\$89.40
DPOR-40006	Clostridium perfringens (profil des toxines) Clostridium perfringens culture must have been done previously.	Isolate	2-3 D	\$89.40
DPOR-20009	Fecal culture + ATB Includes aerobic culture. Campylobacter jejuni/coli/lari. Clostridium perfringens. Salmonella spp. and Shigella.	10 g de selles	3-10 D	\$114.00
DPOR-40004	Salmonella spp. (culture)	Tissue, feces	2-4 D	\$66.10
DPOR-40141	Salmonella (culture) after positive PCR Required for antibiotic susceptibility testing or serotyping			\$54.60

MYCOPLASMAS				
CODE	TEST NAME - DESCRIPTION	SAMPLE	TAT	PRICE
DPOR-40182	M. hyopneumoniae MFIA	0.5 mL Serum (S)	1-2 D	\$12.30
DPOR-40180	M. hyopneumoniae. SRRP Type 1 & 2 MFIA	0.5 mL Serum <b>(S)</b>	1-2 D	\$23.35
DPOR-40034	M. hyopneumoniae Ac ELISA (Idexx)	0.5 mL Serum (S)	1-2 D	\$13.55
DPOR-40107	M. hyopneumoniae Ab ELISA – Titration		2-3 D	\$20.55
DPOR-40154	<b>M. hyopneumoniae qPCR</b> Also available in profile. see qPCR profiles section	Nasal or tracheal swabs, lung, oral fluids	2-3 D	\$31.95
DPOR-40051	M. hyopneumoniae & M. hyorhinis qPCR Also available in profile. see qPCR profiles section	Nasal or tracheal swabs, lung, oral fluids	2-3 D	\$42.75
DPOR-40129	M. hyosynoviae qPCR	Joint swab, oral fluids	1-2 D	\$31.95
DPOR-70099	M. hyopneumoniae P146 sequencing	Respiratory swabs, oral fluids		U.R.

PARASITOLOGY				
CODE	TEST NAME - DESCRIPTION	SAMPLE	TAT	PRICE
DPOR-70002	Parasitology OC (zinc sulfate or Wisconsin). This depends on the age of the animals, the consistency of the faeces and other criteria. This test is done externally.	30 g Feces	2-5 D	\$47.20

PCV2 - PCV3				
CODE	TEST NAME - DESCRIPTION	SAMPLE	TAT	PRICE
DPOR-40037	PCV2 Ab IgG ELISA	0.5 mL Serum <b>(S)</b>	2-3 j	\$13.80
DPOR-40161	PCV2 (2a/2b/2d/2e) & PCV3 qPCR	1.0 mL Serum <b>(S)</b> , tissue	1-2 j	\$43.25

### **PEDV & PoDCV. see TGEV-PRCV- PEDV- PoDCV**

PRRSV				
CODE	TEST NAME - DESCRIPTION	SAMPLE	TAT	PRICE
DPOR-40097	PRRSV Ab ELISA X 3	0.5 mL Serum <b>(S)</b>	1-2 D	\$12.60
DPOR-40108	PRRSV Ab ELISA X 3	0.5 mL oral fluids	1-2 D	\$16.50
DPOR-40198	PRRSV Type 1 & 2 Ab MFIA †	0.5 mL Serum (S)	1-2 D	\$11.80
DPOR-40180	PRRSV Type 1 & 2. M. hyopneumoniae MFIA †	0.5 mL Serum (S)	1-2 D	\$23.35
DPOR-40164	PRRSV type 1 & 2 qPCR †  B Serum (R). lung. serum. oral fluids. processing fluids			\$50.70
DPOR-40150	PRRSV MLV-ATP-Fostera qPCR  Ill lung. serum. oral fluids			\$82.45
DPOR-40047	PRRSV - Sequencing - Genotyping (basic) * Result in up to 14 days.		14 D*	\$138.40
DPOR-40045	PRRSV - Sequencing - Genotyping (regular )			\$194.70

<sup>†</sup> Type 1 (EU) and Type 2 (NA)

qPCR PROFILES				
CODE	TEST NAME - DESCRIPTION	SAMPLE	TAT	PRICE
DPOR-20019	Diarrhea in finisher pigs Profile qPCR Includes Salmonella spp. Lawsonia intracellularis. Brachyspira hyodysenteriae and Brachyspira hampsonii.  * Except for salmonella spp.: results available 3 to 5 days after receipt.	Feces	2-3 D	\$76.25
DPOR-20016	E. coli F4. F18. Lawsonia. Salmonella qPCR	5 g intestinal contents, fecal samples	2-3 D	\$78.40
DPOR-20011	Influenza A. M. hyopneumoniae. M. hyorhinis. G. parasuis qPCR	Nasal or tracheal swab, lung	1-2 D	\$100.05
DPOR-40133	M. hyosynoviae. M. hyorhinis. G. parasuis qPCR	Joint swab	1-2 D	\$54.60
DPOR-40139	PRRSV Type 1 & 2. Influenza A. M. hyopneumoniae qPCR	Lung, oral fluids	1-2 D	\$90.30
DPOR-20020	PRRSV. Influenza A. M. hyopneumoniae. M. hyorhinis. H. parasuis qPCR	Nasal or tracheal swab, lung	1-2 D	\$197.40
DPOR-20015	Rotavirus A & C. E. coli F4. F5. F6 qPCR	5 g intestinal contents, fecal samples	2-3 D	\$95.75
DPOR-20024	Rotavirus A. B. C. Sapovirus qPCR	5 g intestinal contents, fecal samples	1-3 D	\$86.65
DPOR-20021	Salmonella Typhimurium & ETEC post-weaning qPCR	5 g intestinal contents, fecal samples	3-4 D	\$191.45
DPOR-20022	<ul> <li>"Suis-cides" and swine erysipelas qPCR</li> <li>vary depending on conditions:</li> <li>Septicemia (S. suis, A. suis, E. rhusiopathiae): filter organs such as the liver. kidney. spleen;</li> <li>E. rhusiopathiae (swine erysipelas): can also be skin biopsies</li> <li>Pneumonia (A. suis): the lung;</li> <li>Meningitis (S. suis, G. suis): meningeal swabs;</li> <li>Polyserositis (S. suis, G. suis): swabs and fluids from serous cavities.</li> </ul>		1-2 D	\$55.10

ROTAVIRUS				
CODE	TEST NAME - DESCRIPTION	SAMPLE	TAT	PRICE
DPOR-40159	Rotavirus A-C qPCR Also available in profile. see qPCR PROFILES section	5 g Feces	2-3 D	\$43.25
DPOR-40155	Rotavirus A-B-C qPCR	5 g Feces	2-3 D	\$72.50
DPOR-40207	Rotavirus A Sequencing (porcine)	Feces, colon content or colon	10 D	\$167.65
DPOR-40208	Rotavirus C Sequencing (porcine)	Feces, colon content or colon	10 D	\$167.65

SALMONELLA				
CODE	TEST NAME - DESCRIPTION	SAMPLE	TAT	PRICE
DPOR-40185	Salmonella - Ab ELISA	1.0 mL Serum (S)	1-3 D	\$13.00
	Salmonella (culture) see microbiology section			
DPOR-40110	<b>Salmonella spp. qPCR</b> Also available in profile. see qPCR PROFILES section	Tissues, 10 g Feces	2-3 D	\$43.25
DPOR-40140	Salmonella spp. + S. Typhimurium qPCR	Tissue, 10 g Feces	2-3 D	\$44.35
DPOR-40109	Salmonella serotyping (100 serotypes) Salmonella spp. culture must have been done previously.	Isolate	5-10 D	\$40.25

SENECA VALLEY V	IRUS (SVA)			
CODE	TEST NAME - DESCRIPTION	SAMPLE	TAT	PRICE
DPOR-40156	Seneca Valley Virus (SVA) ELISA	0.5 mL Serum <b>(S)</b>	2-3 D	\$14.60
DPOR-40126	Seneca Valley Virus (SVA) qPCR	Oral fluids, wipes	1-2 D	\$45.95

SEROLOGY - MUL	TIPLEX			
CODE	TEST NAME - DESCRIPTION	SAMPLE	TAT	PRICE
DPOR-40198	PRRSV Type 1 & 2 Ab MFIA †	0.5 mL Serum <b>(S)</b>	1-2 D	\$11.80
DPOR-40180	PRRSV Type 1 & 2, M. hyopneumoniae MFIA $^\dagger$	0.5 mL Serum <b>(S)</b>	1-2 D	\$23.35
DPOR-40121	PRRSV - PCV2 - SIV MFIA	0.5 mL Serum <b>(S)</b>	1-2 D	\$16.05
DPOR-40178	PRRSV - PCV2 - SIV, M. hyopneumoniae MFIA	0.5 mL Serum <b>(S)</b>	1-2 D	\$24.35

<sup>&</sup>lt;sup>†</sup> Type 1 (EU) and Type 2 (NA)

SEROTYPING AN	D GENOTYPING			
CODE	TEST NAME - DESCRIPTION	SAMPLE	TAT	PRICE
DPOR-70010	<b>APP Genotyping QC</b> Culture must have been done previously.  This test is done externally.	Isolate	2-3 D	\$101.45
DPOR-70023	G. parasuis Serotyping (15 serotypes) ① QC Culture must have been done previously. This test is done externally.	Isolate	5-10 D	\$77.00
DPOR-70008	G. parasuis Genotyping ① QC  Culture must have been done previously.  This test is done externally.	Isolate	1-2 D	\$96.00
DPOR-70008	S. suis Serotyping (35 serotypes) 🗗 QC Culture must have been done previously. This test is done externally.	Isolate	5-10 D	\$96.00

TGEV-PRCV- PED	V-PODCV			
CODE	TEST NAME - DESCRIPTION	SAMPLE	TAT	PRICE
DPOR-40116	PEDV - Ab ELISA	0.5 mL Serum <b>(S)</b>	1-2 D	\$13.50
DPOR-40152	TGEV - PEDV qPCR  Feces, intestinal contents, swiffers, oral fluids	Ш	1-2 D	\$40.05
DPOR-40018	TGEV - PRCV Ab ELISA	0.5 mL Serum (S)	1-2 D	\$14.00
DPOR-20006	TGEV - PEDV - PoDCV qPCR  Feces, intestinal contents, swiffers. oral fluids		12-24 h	\$42.15

MISCELLANEOU	S VIRUSES			
CODE	TEST NAME - DESCRIPTION	SAMPLE	TAT	PRICE
DPOR-70067	Parvovirus Ab – HI  US This test is done externally.	1.0 mL Serum <b>(S)</b>	1 W	\$25.60
DPOR-40165	Porcine Sapelovirus (PSV) qPCR	Fecal samples, nervous tissue	1-2 D	\$54.60

OTHER BACTERIA				
CODE	TEST NAME - DESCRIPTION	SAMPLE	TAT	PRICE
DPOR-40196	Brachyspira hampsonii	Feces	3 D	\$48.70
DPOR-40197	Brachyspira hyodysenteriae	Feces	3 D	\$48.70
DPOR-40183	Brachyspira hyodysenteriae & B. hampsonii qPCR	Feces	3 D	\$49.90
DPOR-40199	Brachyspira hyodysenteriae & B. pilosicoli qPCR	Feces	3 D	\$49.90
DPOR-40200	Brachyspira pilosicoli qPCR	Feces	1-2 D	\$48.70
	Clostridium perfringens (culture and toxin profile) see microbiology section			
DPOR-20018	Clostridium multiplex qPCR: C. chauvoei. C. septicum. C. novyi & C. sordelii  Pieces of affected tissues (minimum 5 cm x 5 cm x 5 cm. wrapped in absorbent paper towels and placed in a tightly closed container). Swab cultures of affected tissues (swabs without transport medium or with 0.5 mL sterile saline to preserve moisture). Refrigerate.		1-2 D	\$68.95
DPOR-70108	Erysipelothrix rhusiopathiae MFIA ac 🗗 US This test is done externally.	1.0 mL Serum <b>(S)</b>	2-3 D	\$35.60
DPOR-40191	Erysipelothrix rhusiopathiae qPCR  Iliver. kidney. spleen. skin biopsy		1-2 D	\$49.30
DPOR-70018	Leptospira (6 serovars) Ab – MAT 🖆 QC	1.0 mL Serum (S)	5-10 D	\$45.75
DPOR-40205	Leptospira spp. qPCR	Kidney, 2.0 mL urine, EDTA whole blood <b>(L)</b>	1-2 D	\$45.45
DPOR-40005	Pasteurella multocida ToxA (PMT) qPCR	Nasal swab	1-2 D	\$35.60
DPOR-40162	Serratia qPCR  fresh or extended semen. environmental samples		1-2 D	\$62.90

OTHER SERVICES	S AND FEES	
CODE	TEST NAME - DESCRIPTION	PRICE
DPOR-40118	Pooling fees (min. 5 samples)	\$1.80
95454002	Emergency fees (RUSH)	\$23.75
95454003	Cancellation fees	\$23.75
95254001	Intermediate fees	\$38.05
	Cooler upon request	Variable
TRA-0042	QC: Shipping fees in Québec	20.00 \$
TRA-0006	CA: Shipping fees in Canada	40.00 \$
TRA-0003	US: Shipping fees in USA	70.00 \$

Prices are subject to change without notice.



## **Poultry - Tests Offered**

MICROBIOLOGY	(POULTRY)			
CODE	TEST NAME - DESCRIPTION	SAMPLE	TAT	PRICE
DVOL-40003	Aerobic culture  Tissue. swab. liquid. environmental sample  Refrigerate. sterile container or swab with transport medium  (not dry swab).		2-5 D	\$64.45
DVOL-40004	Salmonella spp. (culture)	Tissue, swab, feces, etc.	4-7 D	\$89.70
DVOL-40045	Salmonella spp. (hatchery) Use CFIA mandatory form available on our website (Hatchery Sampling Report)	Fluff, sponge, swab, shoe-cover	4-7 D	\$53.95

PARASITOLOGY (	(POULTRY)			
CODE	TEST NAME - DESCRIPTION	SAMPLE	TAT	PRICE
DVOL-70004	Parasitology(Wisconsin)  QC This test is done externally.	30 g Feces	2-5 D	\$47.20

PCR (POULTRY)				
CODE	TEST NAME - DESCRIPTION	SAMPLE	TAT	PRICE
DVOL-40056	Avian Astrovirus (CAstV) qPCR	Feces, environmental sample	2-3 D	\$65.35
DVOL-20009	Mycoplasma synoviae & M. gallisepticum qPCR (MS-MG)	Tissue, environmental sample	2-3 D	\$67.10
DVOL-40015	Salmonella spp qPCR	Feces, environmental sample	5-10 D	\$52.10
DVOL-40019	<b>Salmonella serotyping (100 serotypes)</b> Culture must have been done previously.	Isolate	5-10 D	\$40.25
DVOL-40016	Salmonella Typhimurium qPCR	Feces, environmental sample	4-7 D	\$51.30

SEROLOGY (POU	LTRY)			
CODE	TEST NAME - DESCRIPTION	SAMPLE	TAT	PRICE
DVOL-70009	<b>AEV (encephalomyelitis Virus) ELISA (1) QC</b> This test is done externally.	1.0 mL Serum <b>(S)</b>	10 D	\$21.65
DVOL-70007	CAV (Infectious Anemia Virus) ELISA	1.0 mL Serum <b>(S)</b>	10 D	\$21.65
DVOL-70029	<b>IBD (Infectious bronchitis Virus) ELISA @QC</b> This test is done externally.	0.5 mL Serum <b>(S)</b>	2-5 D	\$21.65
DVOL-70028	IBDV ELISA ⚠ QC (Infectious Bursal Disease Virus) This test is done externally.	0.5 mL Serum <b>(S)</b>	2-5 D	\$21.65
DVOL-70011	MS (Mycoplasma synoviae) ELISA 🖆 QC This test is done externally.	0.5 mL Serum <b>(S)</b>	2-5 D	\$9.70
DVOL-70013	MG (Mycoplasma gallisepticum) ELISA @ QC This test is done externally.	0.5 mL Serum <b>(S)</b>	2-5 D	\$9.70
DVOL-70030	NDV+ (Newcastle Disease Virus) ELISA ① QC This test is done externally.	0.5 mL Serum <b>(S)</b>	2-5 D	\$21.65
DVOL-70012	Reo (Avian Reovirus) ELISA ② QC This test is done externally.	0.5 mL Serum <b>(S)</b>	2-5 D	\$21.65

OTHER SERVICES	S AND FEES (POULTRY)			
CODE	TEST NAME - DESCRIPTION	SAMPLE	TAT	PRICE
DVOL-40061	Pooling fees (min. 5 samples)			\$1.80
95454002	Emergency fees (RUSH)			\$23.75
95454003	Cancellation fees			\$23.75
95254001	Intermediate fees			\$38.05
	Cooler upon request			Variable
TRA-0042	QC: Shipping fees in Québec			20.00 \$

Prices are subject to change without notice.

# Appendix A – Guidelines for storing and shipping samples to the laboratory •

The way samples are stored between collection and arrival at the laboratory is significant both to facilitate their processing and to ensure the validity of the analyses.

Below. you will find guidelines for some of the most common samples submitted to the laboratory for bacteriological or PCR testing.

Do not hesitate to contact us for more information.

### Feces for bacteriological or PCR testing

- Samples must be placed in tightly sealed containers (jars or flasks with screw caps available at the laboratory if required).
- "Containers" such as plastic bags. examination gloves.
   Vacutainer tubes. or others must never be used.
- If the samples were obtained using swabs. it is recommended that they be placed in a solid (agar) or liquid transport medium (e.g., solid or liquid Amies medium).
- However, for samples intended for PCR testing.
   it is essential that the transport medium be liquid (no agar transport media!)
- Samples must be stored between 2 8 °C.
- They must arrive at the laboratory within 72 hours after collection.

### **Oral fluids for PCR testing**

- Samples must be placed in tightly sealed containers (jars or flasks with screw caps available at the laboratory if required).
- "Containers" such as plastic bags. examination gloves. and Vacutainer tubes. or must never be used.
- Samples must be refrigerated as quickly and stored at 2 - 8 °C.
- They must arrive at the laboratory as soon as possible (ideally within 72 hours after collection).
- If this is not possible. it is recommended to freeze them.

#### **Processing fluids for PCR testing**

- Fluids must be first separated from testicles and tails.
- Samples must be placed in tightly sealed containers (jars or flasks with screw caps available at the laboratory if required).
- "Containers" such as plastic bags, examination gloves.
   Vacutainer tubes or others must never be used.
- Samples must be refrigerated as quickly as possible.
   and stored at 2 8 °C.
- They must arrive at the laboratory as soon as possible (ideally within 72 hours after collection).

### **Wipes for PCR testing**

- The wipes must be soaked with 10 mL of saline before taking the samples
- They must be placed in tightly sealed containers.
- Ideally. it is recommended to use Ziploc plastic bags;
   if possible, two bags per sample.
- "Containers" such as plastic bags. examination gloves or others must NEVER be used.
- Samples must be refrigerated as quickly as possible.
   and stored at 2 8 °C.
- They must arrive at the laboratory as soon as possible (ideally within 72 hours after collection).

### Nasal or tracheobronchial swabs for PCR testing

- The ends of swabs or catheters must be placed in sterile containers with 1 mL of buffered saline (PBS) and sealed.
- It is recommended to use tubes with screw caps (available at the laboratory if required).
- Samples must be refrigerated as quickly as possible.
   and stored at 2 8 °C.
- They must arrive at the laboratory as soon as possible (ideally within 72 hours after collection\*).
- Note that these swabs or catheters cannot be used for bacteriological testing.

## **Appendix B - Aerobic or Anaerobic culture:**

## how to choose?

We regularly receive questions about what type of culture to choose (aerobic or anaerobic?) and the samples to be submitted. The appropriate selection of samples and the type of culture is crucial for the culture to obtain a significant result.

Anaerobic germs. by definition. come from oxygen-poor. moisture-rich sites. To successfully grow these germs in the laboratory. it is essential that samples are not exposed to air and retain moisture.

## The conditions in which anaerobic germs are likely to be involved must include:

- · Tissue necrosis
- Deep abscesses
- Bite wounds
- Wet pleurisy
- Aspiration pneumonia
- Metrits and pyometers
- Oral diseases
- · Joint diseases

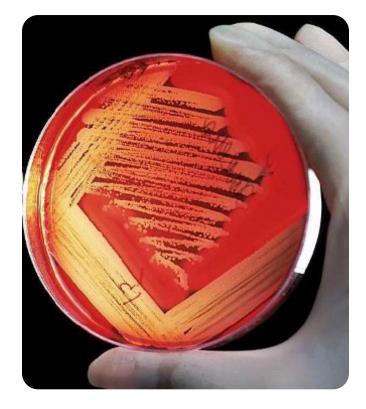
## Appropriate samples for researching anaerobic germs include:

- · Fluids (pleural. peritoneal. joint. or cerebrospinal)
- Deep tissues (muscles, liver, etc.)
- · Intestinal content

## On the other hand, samples that are inappropriate for this type of research include, among others:

- Vaginal swabs
- · Airway swabs and aspirations
- · Skin swabs or superficial wounds
- Urine (unless taken by bladder puncture)

The following rules must apply for the collection. and retention of samples for anaerobic germ research:



- Fluids: If they are taken by aspiration with a syringe, the air
  must be removed from the barrel of the syringe beforehand.
  The fluids must be placed in sterile tubes without additives,
  and the tubes must be filled entirely so as not to leave any
  air. The tubes must be tightly sealed. The syringe may also
  be sent to the laboratory after removing the needle.
- Swabs: Swabs must be placed in an appropriate anaerobic transport medium. such as those available at Biovet.
- In all cases, the samples must be stored at room temperature and reach the laboratory within 48 hours.

#### Reference

Purvis T. et Burklund A. Do I choose aerobic or anaerobic culture. www.ksvdl.org/resources/news/diagnostic insights/january2019/aeorbic-anaerobic-culture.html

# Appendix C – Antibiotic profiles (susceptibility - Kirby-Bauer)

ANTIBIOTICS	AVIAN	SWINE
Amoxicillin	•	•
Ampicillin	•	
Apramycin		•
Ceftiofur	•	•
Enrofloxacin	•	
Erythromycin	•	
Florfenicol	•	•
Gentamycin	•	
Lincomycin	•	•
Neomycin	•	•
Penicillin G (Gram+ only)	•	•
Spectinomycin	•	•
Sulbactam / Ampicillin		•
Sulphamethoxazole	•	
Sulphamethoxazole / Trimethoprim	•	•
Tetracycline	•	•
Tilmicosine		•

OTHER ANTIBIOTICS AVAILABLE		
Amikacin	Cloxacillin	Ofloxacin
Amoxicillin / clavulanic acid	Doxycyclin	Oxacillin (Staph only)
Azithromycin	Fusidic acid	Penicillin / Novobiocin
Bacitracin	Gamithromycin	Piperacillin
Cefalotin	Imipenem	Pirlimycin
Cefovecin	Kanamycin	Polymyxin B
Cefoxitin	Marbofloxacin	Pradofloxacin
Cefpodoxime	Meropenem	Rifampicin
Ceftazidime	Metronidazole	Streptomycin
Cephalexin	Moxifloxacin	Sulphafurazole / Sulfisoxazole
Cephazolin	Mupirocin	Ticarcilline (Gram - only)
Chloramphenicol	Nitrofurantoin	Tildipirosin
Ciprofloxacin	Norfloxacin	Tobramycin
Clindamycin	Novobiocin	

# Appendix D – Protocol for the handling and sending of large masses of animals for veterinary analysis

Here are clear and detailed instructions on how to ensure the safety and efficiency of the process when sending mass that does not fit into standard formalin containers.

Whether you're a veterinarian or a laboratory professional. handling these samples appropriately is essential to prevent health risks and ensure accurate results.

We invite you to carefully follow the recommendations provided in this appendix for the safe and efficient handling of animal masses. If in doubt, don't hesitate to contact our technical team for further help and advice.

### **Protocol**

- 1. In the smallest possible plastic container, place gauze pads or a "pee pad" and soak them with Epredia™ Formalin 10% (ready-to-use formalin). To do this, use about 100 ml, which is equivalent to a small urine collection jar.
- 2. Place the mass inside the prepared container and carefully wrap it in the gauze pads or the "pee pad".
- 3. Close the lid of the container tightly and place it in a closed plastic bag.



Please note that it is strictly forbidden to send a formaldehyde-filled "Ziploc" style bag. as this constitutes a hazard to handling and transportation. Instead, use an appropriate container and follow the instructions provided to ensure the safety of all involved. Please refer to your preservative's Material Safety Data Sheet for details.

Thank you for your commitment to the safety and quality of veterinary testing.

