



**Protocols for pre-treatment of samples/controls
for nucleic acid extraction with the ID Gene™ Mag Fast Extraction kit
and analysis using (RT-) qPCR kits from the ID Gene™ and ID Gene Lyo™ product ranges**

Last update: 07/10/2026

The following pre-treatment protocols are available upon request at the address: info@innovative-diagnostics.com :

RUMINANT RANGE

Abortive diseases

TARGET PATHOGEN	(RT-) qPCR KIT NAME (PRODUCT CODE)	SAMPLE TYPE				EXOGENOUS NON-TARGET POSITIVE CONTROL (NTPC)	ASSOCIATED POSITIVE EXTRACTION CONTROL (PRODUCT CODE)	PRE-TREATMENT PROTOCOL		
		Blood	Swabs	Organs	Other(s)			Name	Version	Modification made
<i>Chlamydomphila</i> spp.	ID Gene™ Chlamydomphila spp Duplex (IDCHLM)	No	Endocervical, vaginal, placental swabs	Organ (spleen) et tissue (placenta)	No	No	CHLM Target Positive Control (TPC-CHLM)	ABORT-MAGFAST	0618	For kits provided with a Target Positive Control (TPC).
<i>Coxiella burnetii</i>	ID Gene™ Q Fever Triplex (IDQF)	No	Endocervical, vaginal, placental swabs	Organ from aborted fetuses (spleen, placenta)	• Milk • Stomachal juice • Faeces	NTPC-QF included in the qPCR kit	QF Target Positive Control (TPC-QF)			
<i>Coxiella burnetii</i> et <i>Chlamydomphila</i> spp.	ID Gene™ Q Fever - Chlamydomphila spp Triplex (IDQFCH)		Individual samples or pools of up to 3			No	QFCH Target Positive Control (TPC-QFCH)			
<i>Neospora caninum</i>	ID Gene™ Neospora caninum Duplex (IDNEO)	No	No	Brain, placenta, muscle	No	No	NEO Target Positive Control (TPC-NEO)			
<i>Anaplasma phagocytophilum</i>	ID Gene™ Anaplasma phagocytophilum Duplex (IDANA)	Whole blood	Endocervical, vaginal, placental swabs	Spleen	No	No	ANA Target Positive Control (TPC-ANA)			
<i>Toxoplasma gondii</i>	ID Gene™ Toxoplasma gondii Duplex (IDTOXO)	No	Endocervical, vaginal, placental swabs	Brain, placenta, cardiac muscle	No	No	TOXO Target Positive Control (TPC-TOXO)			
<i>Campylobacter fetus</i>	ID Gene™ Campylobacter fetus Duplex (IDCAMP)	No	Endocervical and vaginal swabs	No	Preputial washing	No	CAMP Target Positive Control (TPC-CAMP)			

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		Blood	Swabs	Organs	Other(s)			Name	Version	Modification made	
10 pathogens involved in abortions in ruminants	ID Gene™ Ruminant Abortion Multiplex HRM (IDABORT10)	No	Endocervical, vaginal, placental swabs	No	No	Non	No	ABORT10- MAGFAST	0726	Modification of the operating procedure: Change of test volume for organ samples to 100 µL. Updates: • Update to storage recommendations. • Standardization of pretreatment and extraction protocols. • Change to the formatting of the “Extraction and purification of nuclein acids” section. • Updated for documentation purposes.	
				Placenta; spleen, liver from aborted foetus	Stomachal juice from aborted foetus		QF Target Positive Control (TPC-QF)*				
		Whole blood		Placenta, spleen	No		No				
		No		No	Preputial wash sample						
				Placenta	Stomachal juice from aborted foetus						
				Placenta	Stomachal juice from aborted foetus						
				Spleen, liver from aborted foetus	Stomachal juice from aborted foetus						
				No	Brain, placenta, heart muscle from aborted foetus						No
				Endocervical, vaginal, placental swabs	Spleen, liver from aborted foetus						Stomachal juice from aborted foetus
				No	Brain, placenta, heart muscle from aborted foetus						No
• <i>Brucella</i> spp.											
• <i>Coxiella burnetii</i>											
• <i>Anaplasma phagocytohilum</i>											
• <i>Campylobacter fetus</i> spp.											
• <i>Chlamydophila</i> spp.											
• <i>Leptospira</i> spp.											
• <i>Listeria monocytogenes</i>											
• <i>Neospora caninum</i>											
• <i>Salmonella</i> spp.											
• <i>Toxoplasma gondii</i>											

* To be used in the case of relative analyses for *Coxiella burnetii* detection in individual swabs.

Bovine Viral Diarrhea (BVDV) and Border Disease (BDV) viruses

(RT-) qPCR KIT NAME (PRODUCT CODE)	SAMPLE TYPE				EXOGENOUS NON-TARGET POSITIVE CONTROL (NTPC)	ASSOCIATED POSITIVE EXTRACTION CONTROL (PRODUCT CODE)	PRE-TREATMENT PROTOCOL		
	Blood	Swabs	Organs	Other(s)			Name	Version	Modification made
ID Gene™ BVD/BD Triplex (IDBVD)	Whole blood Individual samples or pools of up to 100	No	Spleen	• Serum (individual samples or pools up to 100 samples) • Milk (individual samples or bulk milks) • Ear notch (Individual samples or pools up to 25 samples)	NTPC-BVD included in the qPCR kit NTPC-EN-BVD (for ear notches) provided with the kit ID Gene™ Easy Preparation of Ear Notch Samples (EZNOTCH)	BVD Target Positive Control (TPC-BVD) TPC-EN-BVD (for ear notches) provided with the kit ID Gene™ Easy Preparation of Ear Notch Samples (EZNOTCH)	BVD-MAGFAST	0422	For the IDBVD RT-qPCR kit provided with a Target Positive Control (TPC).
ID Gene™ BVD/BD Triplex 2.0 (IDBVDV2)	Whole blood Individual samples or pools of up to 100	No	Spleen	• Serum (individual samples or pools up to 100 samples) • Milk (individual samples or bulk milks) • Ear notch (Individual samples or pools up to 25 samples)	NTPC-BVDV2 included in the qPCR kit NTPC-EN-BVDV2 provided with the Gene™ Easy Preparation of Ear Notch Samples (EZNOTCHV2)	BVDV Positive Extraction Control (PEC-BVDV) TPC-EN-BVD (for ear notches) provided with the kit ID Gene™ Easy Preparation of Ear Notch Samples 2.0 (EZNOTCHV2)	BVDV2-MAGFAST	0722	For the IDBVD RT-qPCR kit provided with a Positive Extraction Control (PEC).

Brucella spp.

(RT-) qPCR KIT NAME (PRODUCT CODE)	SAMPLE TYPE				EXOGENOUS NON-TARGET POSITIVE CONTROL (NTPC)	ASSOCIATED POSITIVE EXTRACTION CONTROL (PRODUCT CODE)	PRE-TREATMENT PROTOCOL		
	Blood	Swabs	Organs	Other(s)			Name	Version	Modification made
ID Gene™ Brucella spp Triplex (IDBRU)	No	Placental, vaginal, cervical swabs	Organs and tissues	Milk	NTPC-BRU included in the qPCR kit	BRU Positive Extraction Control (PEC-BRU)	BRU- MAGFAST	0319	N/A, IDBRU qPCR kit now available

Capripox viruses including Lumpy Skin Disease, Goatpox and Sheeppox viruses

TARGET PATHOGEN	(RT-) qPCR KIT NAME (PRODUCT CODE)	SAMPLE TYPE				EXOGENOUS NON-TARGET POSITIVE CONTROL (NTPC)	ASSOCIATED POSITIVE EXTRACTION CONTROL (PRODUCT CODE)	PRE-TREATMENT PROTOCOL		
		Blood	Swabs	Organs	Other(s)			Name	Version	Modification made
Capripox viruses (including Lumpy Skin Disease (LSDV), Goatpox and Sheeppox viruses)	ID Gene™ Capripox virus Triplex (IDCPV)	Whole blood	Oral or nasal swabs	Tissues (skin lesions or nodules).	No	NTPC-CPV included in the qPCR kit	CPV Target Positive Control (TPC-CPV)	Capripox- MAGFAST	0825	● Modification of the operating procedure: during the pre-treatment of oral or nasal swabs, 1 mL of 1X PBS buffer is now required for their preparation. Update: ● Extension to other qPCR kits in the capripoxvirus range (IDLSDIVA2L and IDLSDIVA3L). ● Specification of centrifugation conditions for tissue pre- treatment. ● Update of sample storage recommendation.
Lumpy Skin Disease virus (LSDV)	ID Gene™ LSD DIVA Triplex 2.0 (IDLSDIVA2L)					NTPC-LSDIVA included in the qPCR kit	LSDIVA Positive Extraction Control (PEC-LSDIVA)			
	ID Gene™ LSD DIVA Triplex 3.0 (IDLSDIVA3L)					No				

Foot and Mouth Disease Virus (FMDV)

(RT-) qPCR KIT NAME (PRODUCT CODE)	SAMPLE TYPE				EXOGENOUS NON-TARGET POSITIVE CONTROL (NTPC)	ASSOCIATED POSITIVE EXTRACTION CONTROL (PRODUCT CODE)	PRE-TREATMENT PROTOCOL		
	Blood	Swabs	Organs	Other(s)			Name	Version	Modification made
ID Gene Lyo™ FMDV Triplex (IDFMDVL)	Whole blood	Oral and oropharyngeal	Organs and Tissues (e.g. tongue and epithelium from unruptured or recently ruptured vesicles)	• Serum • Milk • Vesicular fluids • Viral cultures • Environmental samples (boot swabs) • Nucleic acid storage card (individual samples or pools of up to 5)	NTPC-FMDV included in the RT-qPCR kit	No	FMDV-MAGFAST	0125	N/A, IDFMDVL RT-qPCR kit now available

Influenza A virus

(RT-) qPCR KIT NAME (PRODUCT CODE)	SAMPLE TYPE				EXOGENOUS NON-TARGET POSITIVE CONTROL (NTPC)	ASSOCIATED POSITIVE EXTRACTION CONTROL (PRODUCT CODE)	PRE-TREATMENT PROTOCOL		
	Blood	Swabs	Organs	Other(s)			Name	Version	Modification made
ID Gene Lyo™ Influenza A Multi-species Triplex (IDFLUAMSL)	No	Nasal / nasopharyngeal swab (individual samples or pools of up to 5)	No	• Milk (individual samples or bulk milks) • Viral culture (individual samples) • Nucleic acid storage cards (individual samples or pools of up to 5)	NTPC-EXO1 included in the RT-qPCR kit	FLUAMS Positive Extraction Control (PEC-FLUAMS)	FLU-MAGFAST	0825	N/A, IDFLUAMSL RT-qPCR kit now available

Mycobacterium avium subsp. *paratuberculosis* (MAP)

(RT-) qPCR KIT NAME (PRODUCT CODE)	SAMPLE TYPE				EXOGENOUS NON-TARGET POSITIVE CONTROL (NTPC)	ASSOCIATED POSITIVE EXTRACTION CONTROL (PRODUCT CODE)	PRE-TREATMENT PROTOCOL		
	Blood	Swabs	Organs	Other(s)			Name	Version	Modification made
ID Gene™ Paratuberculosis Duplex (IDMAP)	No	Boot swabs	No	• Faeces (individual samples or pools of up to 10). • Mycobacterial culture.	NTPC-MAP included in the qPCR kit	MAP Target Positive Control (TPC-MAP)	MAP- MAGFAST	0525	• Update of the faeces preparation protocol with integration of the EZPREP protocol • Update of the boot swab preparation protocol • Refer to the revision history of the IFU for a complete list of modifications made

Mycobacterium tuberculosis*: complex including *M.tuberculosis*, *M.bovis*, *M.africanum*, *M.microti*, *M.canetti*, *M.caprae*, et *M.pinnipedii

(RT-) qPCR KIT NAME (PRODUCT CODE)	SAMPLE TYPE				EXOGENOUS NON-TARGET POSITIVE CONTROL (NTPC)	ASSOCIATED POSITIVE EXTRACTION CONTROL (PRODUCT CODE)	PRE-TREATMENT PROTOCOL		
	Blood	Swabs	Organs	Other(s)			Name	Version	Modification made
ID Gene™ Mycobacterium tuberculosis complex Duplex (IDTUB)	No	No	No	Lymph nodes and peripheral tissues	NTPC-TUB included in the qPCR kit	TUB Positive Extraction Control (PEC-TUB)	TUB- MAGFAST	0124	Update: Addition of an incubation protocol for lysis, sample can be incubated for 20 min at 70°C.

***Mycoplasma agalactiae* and the *Mycoplasma mycoides* cluster (including *Mycoplasma mycoides* subsp. *capri*, *Mycoplasma capricolum* and *Mycoplasma putrefaciens*)**

(RT-) qPCR KIT NAME (PRODUCT CODE)	SAMPLE TYPE				EXOGENOUS NON-TARGET POSITIVE CONTROL (NTPC)	ASSOCIATED POSITIVE EXTRACTION CONTROL (PRODUCT CODE)	PRE-TREATMENT PROTOCOL		
	Blood	Swabs	Organs	Other(s)			Name	Version	Modification made
ID Gene™ Contagious Agalactia Triplex (IDAGA)	No	No	No	Milk (individual samples and bulk milks)	NTPC-AGA included in the qPCR kit	AGA Positive Extraction Control (PEC-AGA)	AGA- MAGFAST	0722	N/A, IDAGA qPCR kit now available

Orbiviruses including the virus responsible for the Epizootic Haemorrhagic Disease (EHDV) and the virus responsible for Bluetongue (BTV)

TARGET PATHOGEN	(RT-) qPCR KIT NAME (PRODUCT CODE)	SAMPLE TYPE				EXOGENOUS NON-TARGET POSITIVE CONTROL (NTPC)	ASSOCIATED POSITIVE EXTRACTION CONTROL (PRODUCT CODE)	PRE-TREATMENT PROTOCOL		
		Blood	Swabs	Organs	Other(s)			Name	Version	Modification made
EHDV	ID Gene™ EHDV Duplex (IDEHDV)	Whole blood (collected in EDTA tube)	No	- Spleen - Organs from aborted foetuses (spleen, liver, heart)	No	No	- EHDV Positive Extraction Control (PEC-EHDV) - BTV & EHDV Target Positive Control (TPC-BTEHD)	Orbivirus-MAGFAST	1125	IDBTEHDADL RT-qPCR kit now available. TPC-BTV is no longer available. TPC-BTEHD and PEC-BTV1-12 were added to the list of available Extraction Controls.
	ID Gene™ EHDV Advantage Duplex (IDEHDVADV)						- EHDV Positive Extraction Control (PEC-EHDV) - BTV & EHDV Target Positive Control (TPC-BTEHD)			
	ID Gene™ BTV & EHDV Advantage Triplex (IDBTEHDADV)						- EHDV Positive Extraction Control (PEC-EHDV) - BTV & EHDV Target Positive Control (TPC-BTEHD) - BTV1-12 Positive Extraction Control (PEC-BTV1-12)			
BTV	ID Gene™ Bluetongue Duplex (IDBTV)						- BTV & EHDV Target Positive Control (TPC-BTEHD) - BTV1-12 Positive Extraction Control (PEC-BTV1-12)			
	ID Gene™ Bluetongue genotypes 8 and 4 Triplex 2.0 (IDBTV8-4V2)						BTV & EHDV Target Positive Control (TPC-BTEHD)			
	ID Gene™ Bluetongue genotype 3 Duplex (IDBTV3)						BTV & EHDV Target Positive Control (TPC-BTEHD)			
	ID Gene™ Bluetongue genotypes 12 Duplex (IDBTV12)						BTV1-12 Positive Extraction Control (PEC-BTV1-12)			
	ID Gene™ Bluetongue genotype 1 Duplex (IDBTV1)						BTV1-12 Positive Extraction Control (PEC-BTV1-12)			

Peste des Petits Ruminants virus (PPRV)

(RT-) qPCR KIT NAME (PRODUCT CODE)	SAMPLE TYPE				EXOGENOUS NON-TARGET POSITIVE CONTROL (NTPC)	ASSOCIATED POSITIVE EXTRACTION CONTROL (PRODUCT CODE)	PRE-TREATMENT PROTOCOL		
	Blood	Swabs	Organs	Other(s)			Name	Version	Modification made
ID Gene™ Peste des Petits Ruminants Duplex (IDPPRV)	Whole blood (collected in EDTA tube)	Oral, nasal, ocular or rectal swabs	Organs or tissues	No	No	PPR Target Positive Control (TPC-PPR)	PPRV- MAGFAST	1217	For the IDPPR RT-qPCR kit supplied with a Target Positive Control (TPC).
ID Gene™ Peste des Petits Ruminants Duplex (IDPPRV)	Whole blood (collected in EDTA tube)	Oral, nasal, ocular or rectal swabs	Organs or tissues	No	No	PPR Target Positive Control (TPC-PPR)	PPRV- MAGFAST	0824	For the IDPPR RT-qPCR kit supplied with a Positive Amplification Control (PAC)



Schmallenberg virus (SBV)

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	Blood	Swabs	Organs	Other(s)			Name	Version	Modification made
ID Gene™ Schmallenberg Duplex (IDSBV)	Whole blood	No	Brain tissues (encephalon)	Serum	No	SBV Target Positive Control (TPC-SBV)	SBV- MAGFAST	0416	For IDSBV RT-qPCR kit provided with a Target Positive Control (TPC).

Shamonda virus (SHAV)

(RT-) qPCR KIT NAME (PRODUCT CODE)	SAMPLE TYPE				EXOGENOUS NON-TARGET POSITIVE CONTROL (NTPC)	ASSOCIATED POSITIVE EXTRACTION CONTROL (PRODUCT CODE)	PRE-TREATMENT PROTOCOL		
	Blood	Swabs	Organs	Other(s)			Name	Version	Modification made
ID Gene™ SHLV Duplex (IDSHLV)	Whole blood	Swab from aborted fetuses	Organ, organ from aborted fetuses	• Serum • Brain fluid	No	No	SHLV- MAGFAST	0826	N/A, IDSHLV RT-qPCR kit now available