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: 23/11/2026

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
Chlamydophila spp.	**ID Gene™ Chlamydophila 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).
Coxiella burnetii	**ID Gene™ Q Fever Triplex** (IDQF)	No	Endocervical, vaginal, placental swabs Individual samples or pools of up to 3	Organ from aborted foetuses (spleen, placenta)	• Milk • Stomachal juice • Faeces	**NTPC-QF included in the qPCR kit**	**QF Target Positive Control** (TPC-QF)			
Coxiella burnetii et *Chlamydophila* spp.	**ID Gene™ Q Fever - Chlamydophila spp Triplex** (IDQFCH)					No	**QFCH Target Positive Control** (TPC-QFCH)			
Neospora caninum	**ID Gene™ Neospora caninum Duplex** (IDNEO)	No	No	Brain, placenta, muscle	No	No	**NEO Target Positive Control** (TPC-NEO)			
Anaplasma phagocytophilum	**ID Gene™ Anaplasma phagocytophilum Duplex** (IDANA)	Whole blood	Endocervical, vaginal, placental swabs	Spleen	No	No	**ANA Target Positive Control** (TPC-ANA)			
Toxoplasma gondii	**ID Gene™ Toxoplasma gondii Duplex** (IDTOXO)	No	Endocervical, vaginal, placental swabs	Brain, placenta, cardiac muscle	No	No	**TOXO Target Positive Control** (TPC-TOXO)			
Campylobacter fetus	**ID Gene™ Campylobacter fetus Duplex** (IDCAMP)	No	Endocervical and vaginal swabs	No	Preputial washing	No	**CAMP Target Positive Control** (TPC-CAMP)			

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
10 pathogens involved in abortions in ruminants • *Brucella* spp. • *Coxiella burnetii* • *Anaplasma phagocytohilum* • *Campylobacter fetus* spp. • *Chlamydophila* spp. • *Leptospira* spp. • *Listeria monocytogenes* • *Neospora caninum* • *Salmonella* spp. • *Toxoplasma gondii*	**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					

* 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 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.

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	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 mycoïdes* cluster (including *Mycoplasma mycoïdes* 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	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.
EHDV	**ID Gene™ EHDV Advantage Duplex** (IDEHDVADV)						• **EHDV Positive Extraction Control** (PEC-EHDV) • **BTV & EHDV Target Positive Control** (TPC-BTEHD)			
EHDV BTV	**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)			
BTV	**ID Gene™ Bluetongue genotypes 8 and 4 Triplex 2.0** (IDBTV8-4V2)						• **BTV & EHDV Target Positive Control** (TPC-BTEHD)			
BTV	**ID Gene™ Bluetongue genotype 3 Duplex** (IDBTV3)						• **BTV & EHDV Target Positive Control** (TPC-BTEHD)			
BTV	**ID Gene™ Bluetongue genotypes 12 Duplex** (IDBTV12)						• **BTV1-12 Positive Extraction Control** (PEC-BTV1-12)			
BTV	**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	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	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)

(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 ™ 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 Individual samples or pools of up to 5	Swab from aborted fetuses	Organ, organ from aborted fetuses	• Serum Individual samples or pools of up to 5 • Brain fluid	No	No	**SHLV-MAGFAST**	**1126**	Update: Addition of testing for pooled whole blood and serum samples. Addition of the procedure for brain fluid.