



# 2019 animal health products overview

Meeting today's diagnostic needs and innovating for tomorrow's challenges

## Bovine/ovine/caprine (ruminant)

Pathogen	Real-time		
	ELISA	PCR	Other
<b>Abortive/reproductive pathogens</b>			
<i>Anaplasma phagocytophilum</i>		•	
Border disease virus	•	•	
Bluetongue virus		•	
Bovine herpes virus type 1 (IBR)	•	•	
Bovine herpes virus type 4		•	
<i>Brucella abortus</i> and <i>B. melitensis</i>	•		
Bovine viral diarrhea virus	•	•	
<i>Campylobacter fetus</i>		•	
<i>Chlamydophila abortus</i>		•	
<i>Chlamydophila</i> spp.	•	•	
<i>Coxiella burnetii</i>	•	•	
<i>Leptospira hardjo</i>	•		
<i>Leptospira</i> spp.		•	
<i>Listeria monocytogenes</i>		•	
<i>Neospora caninum</i>	•	•	
<i>Salmonella</i> spp. and <i>S. enterica</i> spp.		•	
<i>Salmonella dublin</i> and <i>S. typhimurium</i>	•		
Schmallenberg virus		•	
<i>Toxoplasma gondii</i>	•	•	
<i>Tritrichomonas foetus</i>		•	

Pathogen	Real-time		
	ELISA	PCR	Other
<b>Bovine mastitis</b>			
<i>Corynebacterium bovis</i>		•	
<i>Enterococcus</i> spp. (including <i>E. faecalis</i> and <i>E. faecium</i> )		•	
<i>Escherichia coli</i>		•	
<i>Klebsiella oxytoca</i> and/or <i>K. pneumoniae</i>		•	
<i>Mycoplasma alkalescens</i>		•	
<i>Mycoplasma bovigenitalium</i>		•	
<i>Mycoplasma bovis</i>		•	
<i>Mycoplasma californicum</i>		•	
<i>Mycoplasma canadense</i>		•	
<i>Mycoplasma</i> spp.		•	
<i>Prototheca</i> spp.		•	

## Bovine/ovine/caprine (ruminant) (continued)

Pathogen	Real-time		
	ELISA	PCR	Other
<b>Bovine mastitis (continued)</b>			
<i>Serratia marcescens</i>		•	
Staphylococcal β-lactamase gene (penicillin resistance gene)		•	
<i>Staphylococcus aureus</i>		•	
<i>Streptococcus agalactiae</i>		•	
<i>Streptococcus dysgalactiae</i>		•	
<i>Streptococcus uberis</i>		•	
<i>Trueperella pyogenes</i> and/or <i>Peptoniphilus indolicus</i>		•	
Yeast		•	
<b>Intestinal pathogens</b>			
Coronavirus (bovine coronavirus)	•	•	
<i>Cryptosporidium</i>	•		
<i>E. coli</i> F55 (K99)	•		
<i>Mycobacterium avium</i> subsp. <i>paratuberculosis</i> (MAP)—Johne's disease	•	•	
Rotavirus		•	
<b>Respiratory pathogens</b>			
Bovine respiratory syncytial virus (BRV)		•	
<i>Histophilus somni</i>		•	
<i>Mannheimia haemolytica</i>		•	
<i>Mycoplasma bovis</i>		•	
Parainfluenza type 3 (PI3) virus		•	
<i>Pasteurella multocida</i>		•	
<b>Bovine tuberculosis</b>			
<i>Mycobacterium tuberculosis</i> complex	•	•	•†
<b>Bovine spongiform encephalopathy (BSE)</b>			
Prions			•†
<b>Foot-and-mouth disease</b>			
Foot-and-mouth disease virus (FMDV)	•		
<b>Other pathogens</b>			
Caprine arthritis encephalitis virus (CAEV)	•		
Epizootic hemorrhagic disease virus (EHDV)		•	
Maedi visna virus	•		
<i>Mycoplasma agalactiae</i>		•	
Peste des petits ruminants virus		•	

## Multipathogen detection tests for ruminants

Pathogen	Real-time		
	ELISA	PCR	Other
Rotavirus, coronavirus, <i>E. coli</i> F5 (K99), <i>Cryptosporidium</i>	•		
<i>Anaplasma phagocytophilum</i> , bovine herpes virus type 4, <i>Campylobacter fetus</i> , <i>Chlamydophila</i> spp., <i>Coxiella burnetii</i> , <i>Listeria monocytogenes</i> , pathogenic <i>Leptospira</i> spp.,* <i>Salmonella</i> spp.		•	
<i>Histophilus somni</i> , <i>Mycoplasma bovis</i> , bovine coronavirus, bovine respiratory syncytial virus, bovine parainfluenza 3 virus, <i>Pasteurella multocida</i> , <i>Mannheimia haemolytica</i>		•	
<i>Mycoplasma bovis</i> , <i>Staphylococcus aureus</i> , <i>Streptococcus agalactiae</i> , <i>Streptococcus uberis</i>		•	
<i>Mycoplasma</i> spp., <i>Mycoplasma alkalescens</i> , <i>Mycoplasma bovis</i> , <i>Mycoplasma bovigenitalium</i> , <i>Mycoplasma canadense</i> , <i>Mycoplasma californicum</i> , <i>Staphylococcus aureus</i> , <i>Streptococcus agalactiae</i>		•	
<i>Staphylococcus aureus</i> , <i>Staphylococcus</i> spp., <i>Streptococcus agalactiae</i> , <i>Streptococcus dysgalactiae</i> , <i>Streptococcus uberis</i> , <i>Escherichia coli</i> , <i>Enterococcus</i> spp. (including <i>E. faecalis</i> and <i>E. faecium</i> ), <i>Klebsiella oxytoca</i> (and/or <i>K. pneumoniae</i> ), <i>Serratia marcescens</i> , <i>Corynebacterium bovis</i> , <i>Trueperella pyogenes</i> and/or <i>Peptoniphilus indolicus</i> , staphylococcal β-lactamase gene (penicillin resistance gene), <i>Mycoplasma bovis</i> , <i>Mycoplasma</i> spp., yeast, <i>Prototheca</i> spp.		•	

† Other test formats include lateral flow immunochromatographic, agglutination, and western blot assays.

\* The Applied Biosystems™ VetMAX™ PathoLept™ Real-Time PCR Kit is a multispecies kit designed to detect 25 pathogenic *Leptospira* strains.

## Porcine

Pathogen	ELISA	Real-time PCR	Other
<b>Respiratory pathogens</b>			
<i>Mycoplasma hyopneumoniae</i>		•	
Porcine circovirus type 2 (PCV2)		•	
Porcine reproductive and respiratory disease virus (PRRSV), NA and EU strains	•	•	
Swine influenza virus (SIV) type A and genotypes	•	•	
<b>Intestinal pathogens</b>			
<i>Brachyspira hyodysenteriae</i>		•	
<i>Lawsonia intracellularis</i>		•	
Porcine epidemic diarrhea virus (PEDV)		•	
Swine delta coronavirus (SDCoV)		•	
Transmissible gastroenteritis virus (TGEV)		•	
<b>Foot-and-mouth disease</b>			
Foot-and-mouth disease virus (FMDV)	•		
<b>Classical swine fever</b>			
Classical swine fever virus (CSFV)	•	•	
<b>Aujeszky's disease or pseudorabies</b>			
Pseudorabies virus gB and gE	•		
<b>Other pathogens</b>			
African swine fever virus (ASFV)		•	
Porcine parvovirus	•	•	
Swine vesicular disease virus (SVDV)	•		
<b>Meat harvest</b>			
Hepatitis E virus	•		
<i>Mycobacterium avium</i> subsp. <i>avium</i>	•		
<i>Salmonella</i> serogroups B, C1, and D	•		
<i>Toxoplasma gondii</i>	•		
<i>Trichinella</i> spp.	•		•†

## Aquaculture

Pathogen	ELISA	Real-time PCR	Other
Infectious hypodermal and hematopoietic necrosis virus (IHHNV)		•	
Infectious myonecrosis virus (IMNV)		•	
Taura syndrome virus (TSV)		•	
Yellow head disease virus (YHV)		•	
White spot syndrome virus (WSSV)		•	
Infectious salmon anaemia virus		•	
Koi herpes virus		•	
Infectious hematopoietic necrosis virus		•	
Viral hemorrhagic septicemia virus		•	
Viral nervous necrosis virus		•	

† Other test formats include lateral flow immunochromatographic, agglutination, and western blot assays.

## Equine

Pathogen	ELISA	Real-time PCR	Other
Equine arteritis virus		•	
West Nile virus		•	

## Avian

Pathogen	ELISA	Real-time PCR	Other
Avian mycoplasmas ( <i>Mycoplasma gallisepticum</i> and <i>Mycoplasma synoviae</i> )		•	
Avian influenza type A		•	
Avian metapneumovirus		•	
<i>Mycoplasma iowae</i>		•	
Newcastle disease (NDV)		•	
West Nile virus		•	

## Feline

Pathogen	ELISA	Real-time PCR	Other
Feline coronavirus (FCoV)		•	

## Multispecies

Pathogen	ELISA	Real-time PCR	Other
<i>Anaplasma phagocytophilum</i>		•	
<i>Chlamydomphila</i> spp.		•	
<i>Salmonella enterica</i> spp.		•	

## Ordering information

Product	Quantity	Cat. No.
<b>Sample collection</b>		
GenoTube Livestock Swabs	1 tube	9062010
<b>Master mixes</b>		
AgPath-ID One-Step RT-PCR Reagents	100 reactions	AM1005
	500 reactions	4387424
	1,000 reactions	4387391
Path-ID qPCR Master Mix	100 reactions	4388643
	500 reactions	4388644
VetMAX-Plus qPCR Master Mix	100 reactions	4415327
VetMAX-Plus One-Step RT-PCR Kit	100 reactions	4415328
VetMAX-Plus Multiplex One-Step RT-PCR Kit	100 reactions	4415330
Path-ID Multiplex One-Step RT-PCR Kit	100 reactions	4442135
	500 reactions	4442136
	1,000 reactions	4442137
<b>Sample preparation</b>		
MagMAX CORE Nucleic Acid Purification Kit	100 reactions	A32700
	500 reactions	A32702
MagMAX CORE Mechanical Lysis Module	100 reactions	A32836
MagMAX CORE Lysis Solution	50 mL	A32837
MagMAX CORE Nucleic Acid Purification Kit + Mechanical Lysis Module	100 reactions	A37487
MagMAX CORE Nucleic Acid Purification Kit + Mechanical Lysis Module + Glass Microbeads	100 reactions	A37488
MagMAX CORE Glass Microbeads	100 reactions	A37489
MagMAX CORE Nucleic Acid Purification Kit with Mastitis & Panbacteria Module	100 reactions	A40289

Product	Quantity	Cat. No.
<b>Sample preparation (continued)</b>		
MagMAX-96 AI/ND Viral RNA Isolation Kit	384 reactions	AM1835
MagMAX Total Nucleic Acid Isolation Kit	100 reactions	AM1840
	50 reactions	AM1939
MagMAX-96 Viral RNA Isolation Kit	96 reactions	AMB1836
	5 x 96 reactions	AMB18365
VetMAX Ear Notch Fast Lysis Kit	200 tests	FLK
Carrier RNA	500 µL	4382878
MagMAX Pathogen RNA/DNA Kit	480 reactions	4462359
PK Buffer for MagMAX-96 DNA Multi-Sample Kit	96 reactions	4489111
<b>Internal positive controls (IPCs)</b>		
VetMAX Xeno Internal Positive Control RNA	100 reactions	A29763
	500 reactions	A29761
VetMAX Xeno Internal Positive Control DNA	100 reactions	A29764
	500 reactions	A29762
VetMAX Xeno Internal Positive Control—VIC Assay	100 reactions	A29765
	500 reactions	A29767
VetMAX Xeno Internal Positive Control—LIZ Assay	100 reactions	A29766
	500 reactions	A29768
<b>FAS training</b>		
One-Day Training, Customer Site, Animal Health	1 day	A25784
One-Day Training, Thermo Fisher Scientific Site, Animal Health	1 day	A25785
Implementation Program, Animal Health	4 days	A25786

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