MEDIAN Diagnostics

VDx® PCR

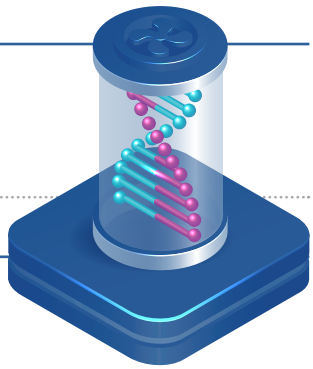
Product Catalogue

- Real-time PCR (qPCR)
- Conventional PCR

Let's contribute to human and animal health with diagnostic business

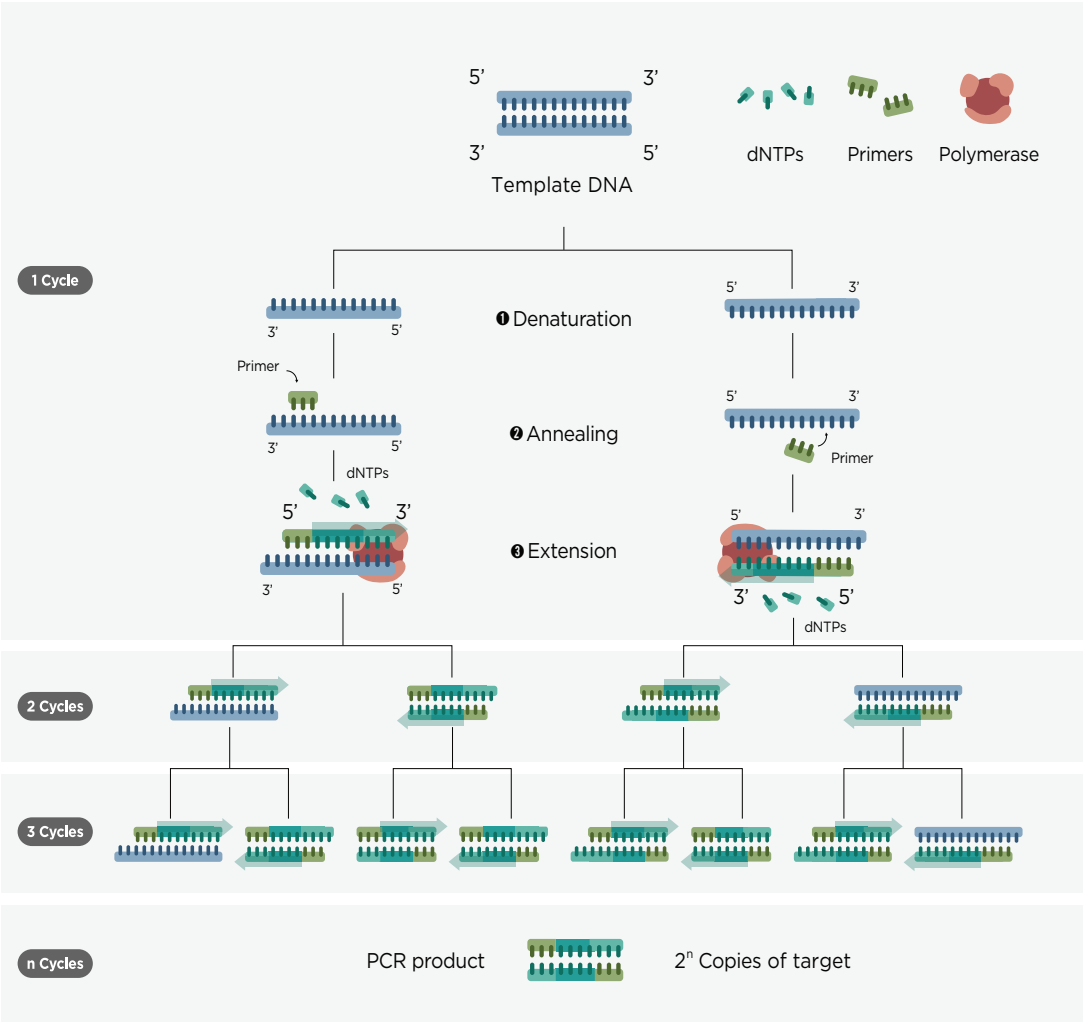
VDx® Conventional PCR

Conventional Polymerase Chain Reaction

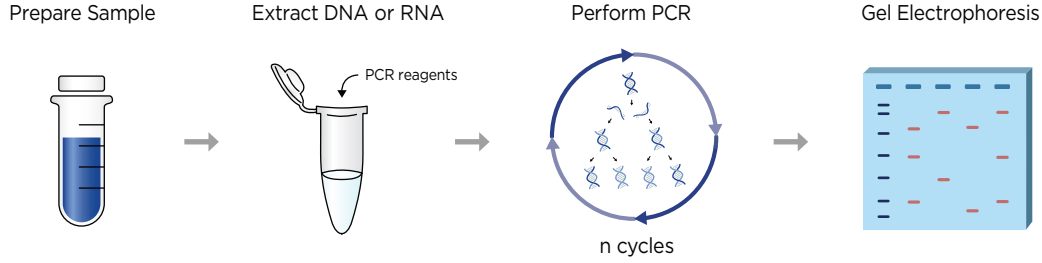


VDx® Conventional PCR is used to test the genes of pathogens prevailed in livestock with high sensitivity by using PCR or RT-PCR technology. This reagent is composed of a 1-step premix and can test by adding extracted samples directly into the premix. This can prevent the laboratory from cross-contamination. In addition, it consists of Multiplex PCR to enable the amplification of various genes at the same time in order to reduce the time and cost. The amplified gene may be checked by electrophoresis and the test reliability can be secured by offering different sizes of Control DNA for Validation.

Principle



Work Flow

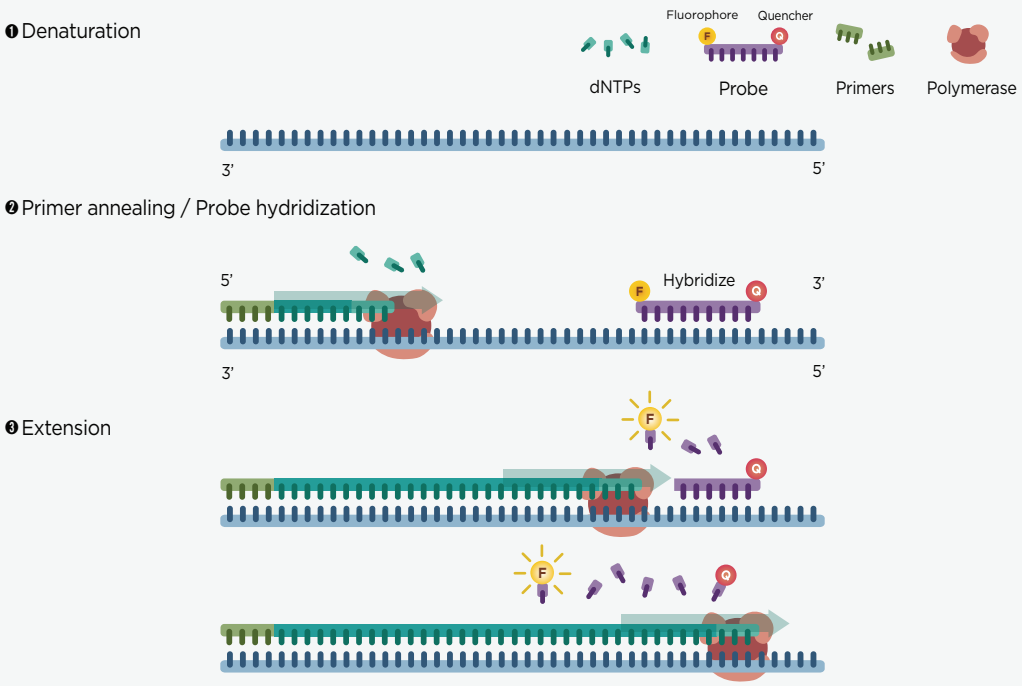


VDx® Real Time PCR (qPCR)

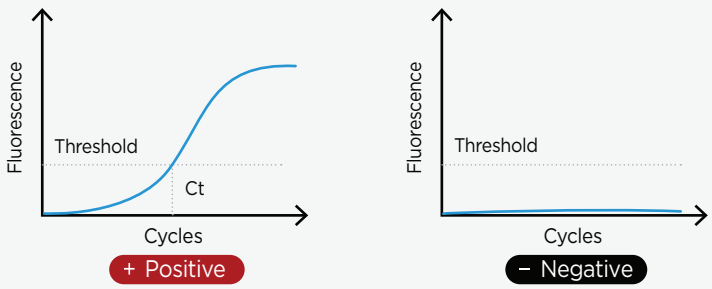
Real-time PCR (quantitative PCR)

VDx® Real-Time PCR (qPCR) is a reagent for high-sensitivity testing of the genes of pathogens in livestock using Taqman probe technology. This reagent is composed of 1-step premix, which can be directly added to the premix to prevent cross-contamination in the laboratory, and it is possible to check the reaction in real time. In addition, multiplex qPCR can be used to amplify multiple genes at the same time, saving time and money. In addition, since Taqman probe is used, the specificity is high and the reliability of the test can be secured.

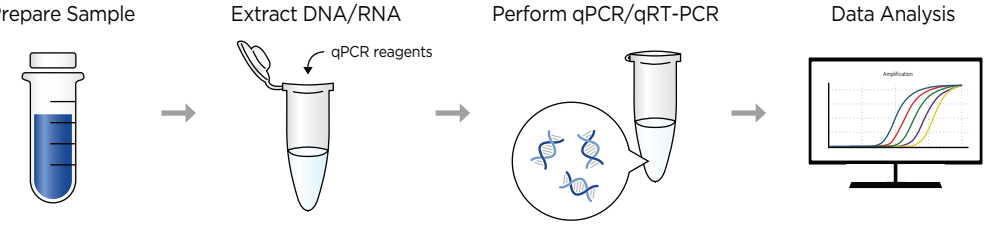
Principle



Results



Work Flow



MEDIAN Diagnostics

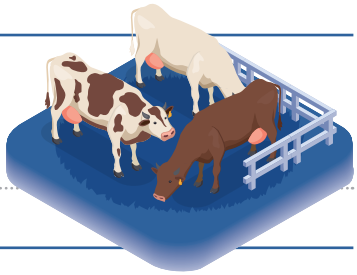
VDx® PCR

Product Catalogue

Let's contribute to human and animal health with diagnostic business

CONTENTS

VDx® BLV PCR / Nested PCR



Research Use Only

Bovine Leukemia

Bovine Leukemia Virus (BLV) is a retrovirus that may cause lymphosarcoma in cattle. The virus resides in blood lymphocytes where circulating antibodies are unable to neutralize it. Therefore, once an animal is infected with BLV, it is infected for life. BLV is economically significant to the producer because of premature culling or death as a result of lymphosarcoma.

VDx® BLV PCR / Nested PCR are provide a range of testing for the detection of BLV by PCR method.

Introduction

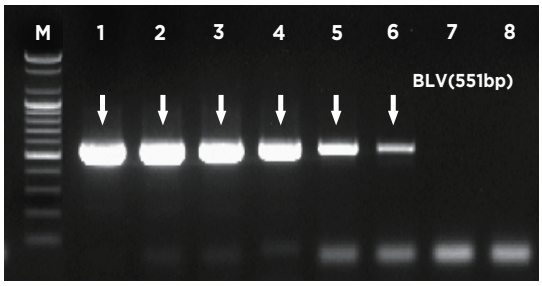
+ **Target disease** : BLV
+ **Species** : Cattle
+ **Specimens** : White blood cells, whole blood and lesion tissue
+ **Sample of BLV Nested PCR** : 1st BLV PCR product
+ **Target gene** : BLV env gene

Product	Virus	Taget gene	Size
BLV PCR	BLV	env	551 bp
	Control DNA	-	679 bp
Nested PCR	BLV	env	367 bp

Technical Data

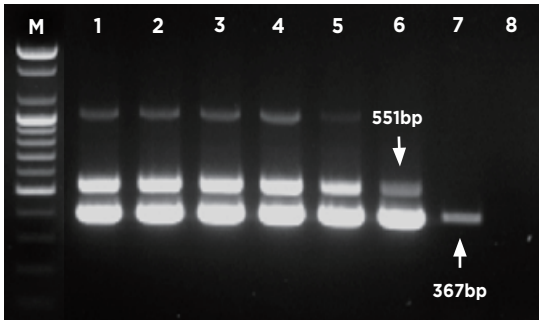
Samples that are blurred or not visible in positive samples by 1st BLV PCR (Cat No. NB-BLV-11) can be clearly identified in BLV nested PCR (Cat No. NB-BLV-12).

BLV PCR



Nested PCR

BLV nested PCR

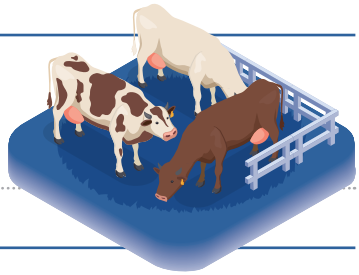


M : Size Maker
Lane 1-7 : BLV Positive samples
Lane 8 : Negative sample

Order Information

Cat No.	Product Name	Quantity
NB-BLV-11	VDx® BLV PCR	50 Tests/Box
NB-BLV-12	VDx® BLV nested PCR	50 Tests/Box

VDx® BLV qPCR



Research Use Only

BLV

VDx® BLV qPCR is a real-time PCR based test for detection of Bovine Leukemia Virus (BLV) DNA.

Introduction

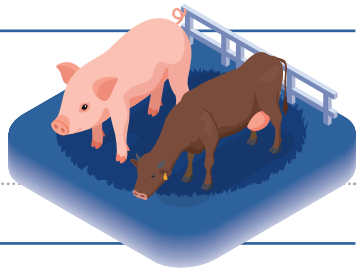
+ **Target disease** : BLV
+ **Species** : Cattle
+ **Specimens** : Whole blood, leukocyte and tissue homogenates
+ **Target gene** : BLV pol gene

Target	Fluorophore	Quencher
BLV	FAM	non-Fluorescent
IPC	HEX / VIC	non-Fluorescent

Order Information

Cat No.	Product Name	Quantity
NB-BLV-31	VDx® BLV qPCR	96 Tests/Box

VDx® Rotavirus VP6 RT-PCR



Research Use Only

Rotavirus

Rotavirus is an RNA virus with size of 80nm belonging to Reo virus. After being discovered for the first time in 1973, it occurs throughout the year as it is persistent in farms for the most part. Although the infection rate is high, the death rate is low (7~20%). It is characterized by diarrhea symptoms in three week old animals for the most part.

VDx® Rotavirus VP6 RT-PCR is a RT-PCR based test for detection of Rotavirus A RNA.

Introduction

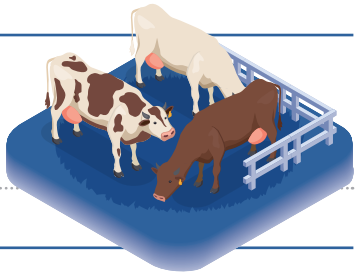
+ **Target disease** : Rotavirus A
+ **Species** : Swine and Cattle
+ **Specimens** : Stool and lesion tissue homogenates
+ **Target gene** : Rotavirus A VP6 gene

Virus	Taget gene	Size
Rotavirus	FAM	332 bp
Control DNA	-	644 bp

Order Information

Cat No.	Product Name	Quantity
NM-ROT-11	VDx® Rotavirus VP6 RT-PCR	50 Tests/Box

VDx® BVDV qRT-PCR (type1,2 dual)



Research Use Only

Bovine
Viral
Diarrhea

Bovine Viral Diarrhea (BVD) is the first class legally notifiable communicable disease and a list disease determined by the Office of International Epizootics (OIE). It is known to cause serious damage to cattle. BVD is caused by the Bovine Viral Diarrhea Virus (BVDV). It is a virus from the *Pestivirus* genus similar to Classical Swine Fever Virus (CSFV).

VDx® BVDV qRT-PCR (type1, 2 dual) is a multiplex real-time PCR based test for detection and identification of BVDV RNA.

Introduction

+ **Target disease** : BVDV
+ **Species** : Cattle
+ **Specimens** : 10% dilution feces, whole blood and tissue homogenates
+ **Target gene** : BVDV 5'UTR gene

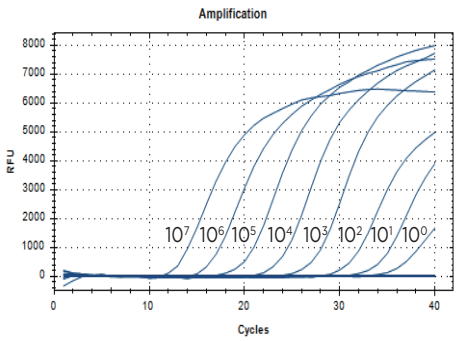
Target	Fluorophore	Quencher
BVDV type1	FAM	non-Fluorescent
BVDV type2	Texas Red/ROX	non-Fluorescent
IPC	HEX / VIC	non-Fluorescent

Features

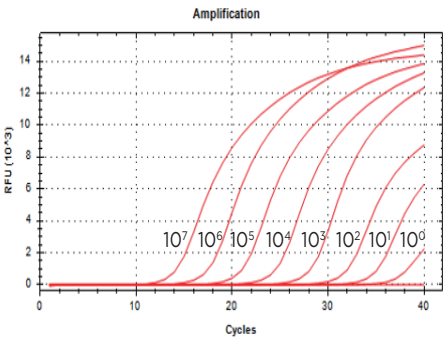
+ Comfirmatory diagnosis of BVDV
+ Suitable for screening of BVDV outbreak
+ Differential diagnosis of BVDV type1 and BVDV type2
+ Limit of Detection (LoD) : 1 copy/ul

Technical data

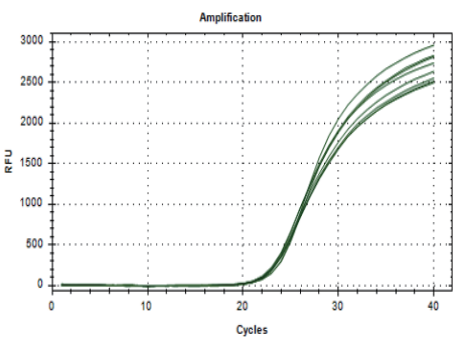
BVDV (FAM)



BVDV2 (TxR)



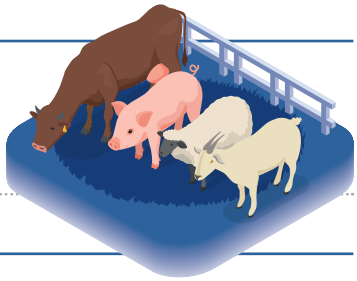
IPC (HEX)



Order Information

Cat No.	Product Name	Quantity
NB-BVD-31	VDx® BVDV qRT-PCR(type1,2 dual)	96 Tests/Box

VDx® FMDV qRT - PCR



Foot and Mouth Disease

Foot-and-Mouth Disease (FMD) is the most contagious disease of mammals and has a great potential for causing severe economic loss in susceptible cloven-hoofed animals. There are seven serotypes of Foot-and-Mouth Disease Virus (FMDV), namely, O, A, Asia1, SAT 1, SAT 2, SAT 3 and C.
VDx® FMDV qRT-PCR is a real-time RT-PCR based test for detection and identification of FMDV RNA.

Introduction

+ **Target disease** : FMDV
+ **Species** : Artiodactyla (Cattle, Swine etc.)
+ **Specimens** : Vesicular fluid, lesion tissue homogenates, cultivated virus
+ **Target gene** : FMDV 3D & 5'UTR gene

Features

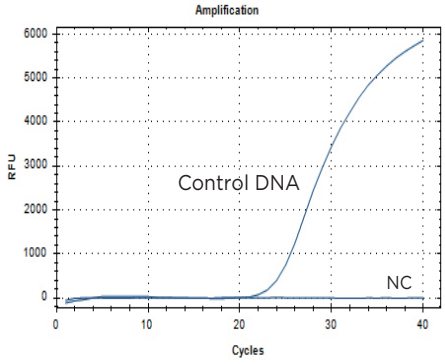
+ Comfirmatory diagnosis of FMDV
+ High sensitive detection of FMDV in infected samples
+ Variety serotypes can common detection
+ High reproducibility and high repeatability

Performance

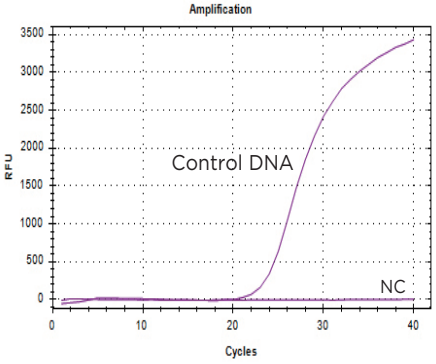
Test	Results
Analytical Sensitivity (Limit of Detection, LoD)	FMDV 3D gene : RNA 5 copies/ul FMDV 5'UTR gene : RNA 5 copies/ul
Analytical Specificity (Cross-reaction)	No Cross-reactivity with 14 other pathogens (PRRSV, EMCV, JEV, SIV, ADV, PPV, PCV2, BVDV1, BVDV2, BCV, Rota, Cryptosporidium, Giardia Lamblia, E-coli K99)
Clinical Sensitivity	100% (91/91)
Clinical Specificity	Swine Negative samples : 100% (94/94) Bovine Negative samples : 100% (63/63)

Target gene : FMDV 3D(FAM) & 5'UTR(Cy5) gene

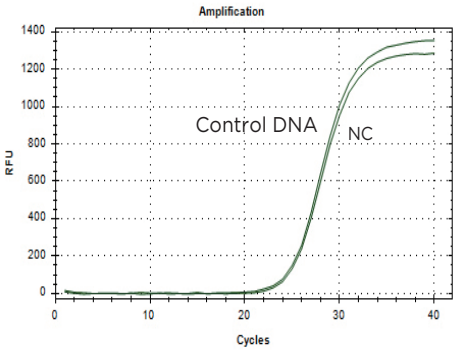
FMDV 3D (FAM)



FMDV 5'UTR (Cy5)



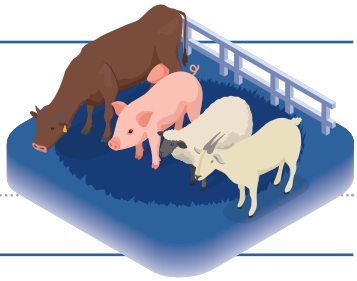
IPC (HEX)



Order Information

Cat No.	Product Name	Quantity
NM-FMD-31	VDx® FMDV qRT-PCR	96 Tests/Box

VDx® FMDV O qRT - PCR



Foot and Mouth Disease

Foot-and-Mouth Disease (FMD) is the most contagious disease of mammals and has a great potential for causing severe economic loss in susceptible cloven-hoofed animals. There are seven serotypes of Foot-and-Mouth Disease Virus (FMDV), namely, O, A, Asia1, SAT 1, SAT 2, SAT 3 and C.
VDx® FMDV O qRT-PCR is used for the detection of viral RNA of FMDV type O by real-time PCR method.

Introduction

+ **Target disease** : FMDV type O
+ **Species** : Artiodactyla (Cattle, Swine etc.)
+ **Specimens** : Vesicular fluid, lesion tissue homogenates, cultivated virus
+ **Target gene** : FMDV VP1 gene

Features

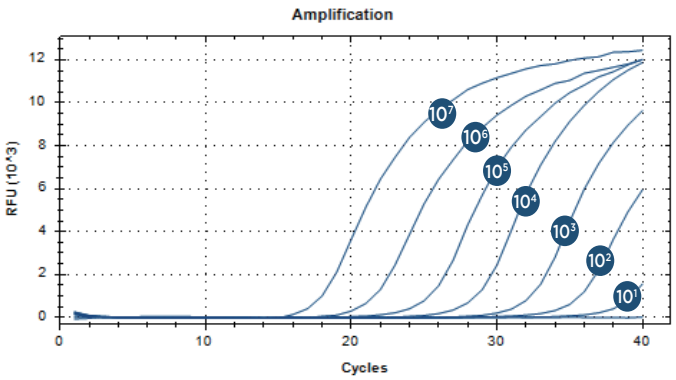
+ Comfirmatory diagnosis of FMDV type O
+ High sensitive detection of FMDV type O in infected samples
+ FMDV type O can specific detection
+ High reproducibility and high repeatability

Performance

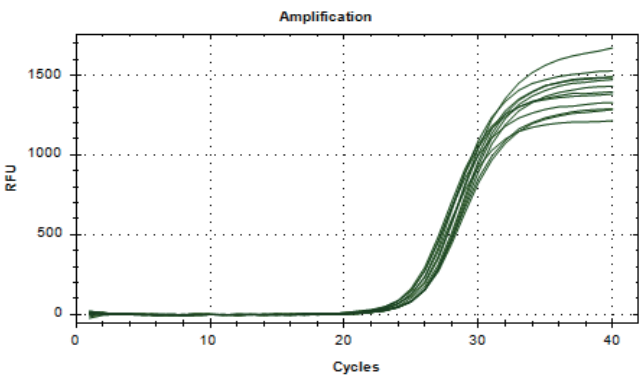
Test	Results
Analytical Sensitivity (Limit of Detection, LoD)	10 copies/ul
Analytical Specificity (Cross-reaction)	No Cross-reactivity with other pathogens (PRRSV, EMCV, JEV, SIV, ADV, PPV, PCV2, BVDV1, BVDV2, BCV, Rota, Cryptosporidium, Giardia Lamblia, *E-coli* K99)
Clinical Sensitivity	100% FMDV O serotype samples were detected 100% exactly without cross reaction.
Clinical Specificity	Swine Negative samples : 100% (94/94) Bovine Negative samples : 100% (63/63)

Technical Data

FAM (FMDV O)



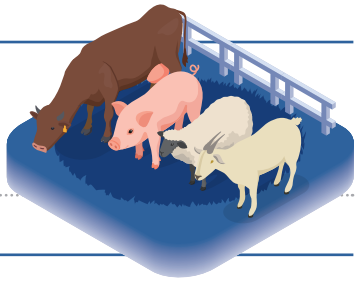
HEX (IPC)



Order Information

Cat No.	Product Name	Quantity
NM-FMD-32	VDx® FMDV O qRT-PCR	96 Tests/Box

VDx® FMDV A qRT - PCR



Foot and Mouth Disease

Foot-and-Mouth Disease (FMD) is the most contagious disease of mammals and has a great potential for causing severe economic loss in susceptible cloven-hoofed animals. There are seven serotypes of Foot-and-Mouth Disease Virus (FMDV), namely, O, A, Asia1, SAT 1, SAT 2, SAT 3 and C.
VDx® FMDV A qRT-PCR is used for the detection of viral RNA of FMDV type A by real-time PCR method.

Introduction

+ **Target disease** : FMDV type A
+ **Species** : Artiodactyla (Cattle, Swine etc.)
+ **Specimens** : Vesicular fluid, lesion tissue homogenates, cultivated virus
+ **Target gene** : FMDV VP1 gene

Features

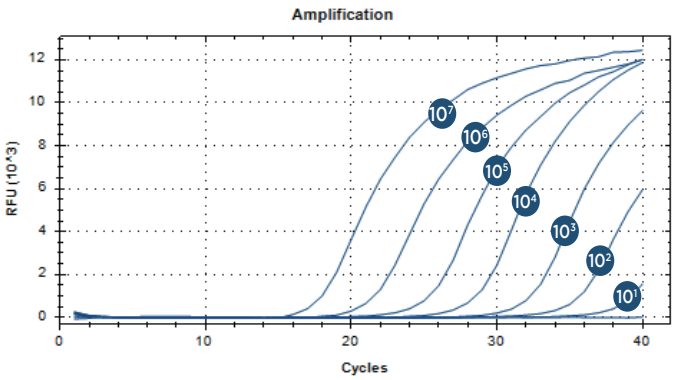
+ Comfirmatory diagnosis of FMDV type A
+ High sensitive detection of FMDV type A in infected samples
+ FMDV type A can specific detection
+ High reproducibility and high repeatability

Performance

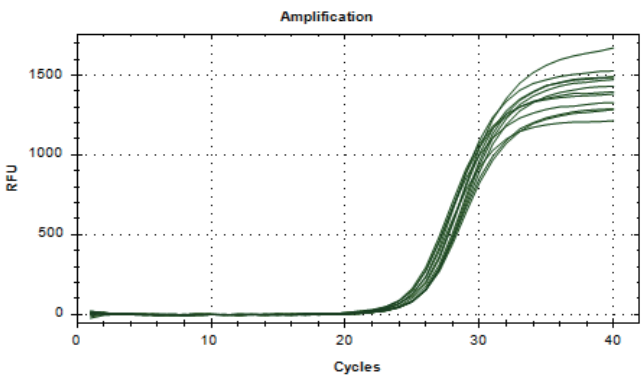
Test	Results
Analytical Sensitivity (Limit of Detection, LoD)	10 copies/ul
Analytical Specificity (Cross-reaction)	No Cross-reactivity with other pathogens (PRRSV, EMCV, JEV, SIV, ADV, PPV, PCV2, BVDV1, BVDV2, BCV, Rota, Cryptosporidium, Giardia Lamblia, *E-coli* K99)
Clinical Sensitivity	100% FMDV A serotype samples were detected 100% exactly without cross reaction.
Clinical Specificity	Swine Negative samples : 100% (94/94) Bovine Negative samples : 100% (63/63)

Technical Data

FAM (FMDV A)



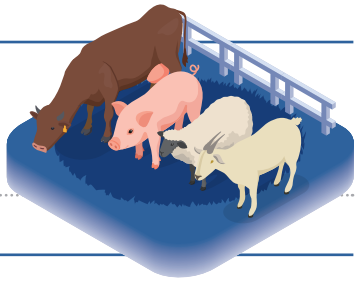
HEX (IPC)



Order Information

Cat No.	Product Name	Quantity
NM-FMD-33	VDx® FMDV A qRT-PCR	96 Tests/Box

VDx® FMDV Asia1 qRT - PCR



Foot and Mouth Disease

Foot-and-Mouth Disease (FMD) is the most contagious disease of mammals and has a great potential for causing severe economic loss in susceptible cloven-hoofed animals. There are seven serotypes of Foot-and-Mouth Disease Virus (FMDV), namely, O, A, Asia1, SAT 1, SAT 2, SAT 3 and C.
VDx® FMDV Asia1 qRT-PCR is used for the detection of viral RNA of FMDV type Asia1 by real-time PCR method.

Introduction

+ **Target disease** : FMDV type Asia1
+ **Species** : Artiodactyla (Cattle, Swine etc.)
+ **Specimens** : Vesicular fluid, lesion tissue homogenates, cultivated virus
+ **Target gene** : FMDV VP1 gene

Features

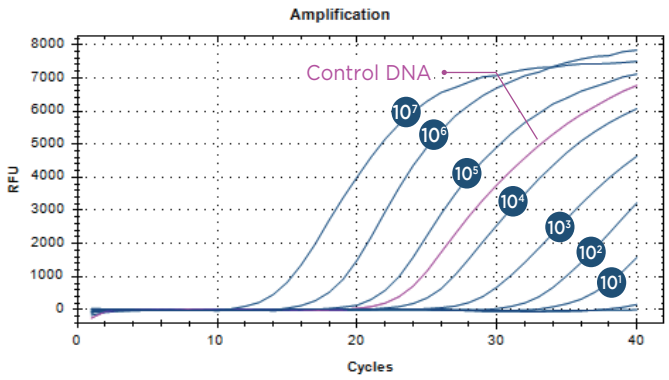
+ Comfirmatory diagnosis of FMDV type Asia1
+ High sensitive detection of FMDV type Asia1 in infected samples
+ FMDV type Asia1 can specific detection
+ High reproducibility and high repeatability

Performance

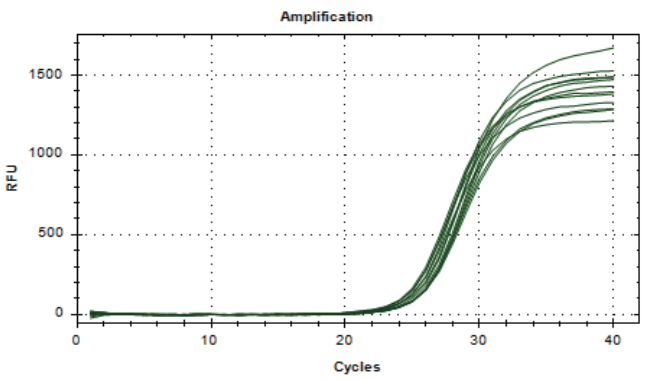
Test	Results
Analytical Sensitivity (Limit of Detection, LoD)	10 copies/ul
Analytical Specificity (Cross-reaction)	No Cross-reactivity with other pathogens (PRRSV, EMCV, JEV, SIV, ADV, PPV, PCV2, BVDV1, BVDV2, BCV, Rota, Cryptosporidium, Giardia Lamblia, *E-coli* K99)
Clinical Sensitivity	100% FMDV Asia1 serotype samples were detected 100% exactly without cross reaction.
Clinical Specificity	Swine Negative samples : 100% (94/94) Bovine Negative samples : 100% (63/63)

Technical Data

FAM (FMDV Asia1)



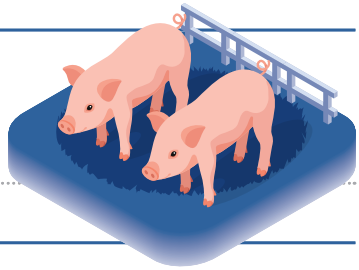
HEX (IPC)



Order Information

Cat No.	Product Name	Quantity
NM-FMD-34	VDx® FMDV Asia1 qRT-PCR	96 Tests/Box

VDx® Abortion Gene Diagnosis



Abortion

Swine Viral Abortion is caused by several viral pathogens and occurs by a single or multiple infections. The antigen test to detect the abortion pathogens has limitation to use because antigen and antibody coexist. Therefore, a DNA test is the most accurate and appropriate test method.

Product

VDx® Abortion MP PCR (PPV / ADV)

VDx® Abortion MP PCR (PPV/ADV) is a reagent that can test abortion causer with Multiplex and precisely examine the genes of PPV and ADV.

Introduction

+ **Target disease** : Porcine Parvovirus (PPV) and Aujeszky Disease virus (ADV)
+ **Species** : Swine
+ **Specimens** : Tonsil, lymph nodes, lung and Fetal pleural effusion
+ **Target gene** : ADV gD gene / PPV VP2 gene

Virus	Taget gene	Size
ADV	gD	282 bp
PPV	VP2	458 bp
Control DNA	-	282bp, 458 bp

Performance

Test	Results
Analytical Sensitivity (LoD)	ADV Specimens : ≤ $10^{2.0}$ $TCID_{50}$/ml, ADV DNA : ≤ 10 copies/ul PPV Specimens : ≤ $10^{1.0}$ $TCID_{50}$/ml, PPV DNA : ≤ 10 copies/ul
Analytical Specificity (Cross-reaction)	No Cross-reactivity with PRRSV, EMCV, JEV, CSFV, SIV, PCV2

Product

VDx® Abortion MP RT - PCR II (EMCV/JEV)

VDx® Abortion MP RT-PCR II (EMDV/JEV) is a reagent that can test abortion causer with Multiplex and precisely examine the genes of EMCV and JEV.

Introduction

+ **Target disease** : Encephalomyocarditis virus (EMCV) and Japanese encephalitis virus (JEV)
+ **Species** : Swine
+ **Specimens** : Tonsil, lymph nodes, lung and Fetal pleural effusion
+ **Target gene** : EMCV 3D gene and JEV E gene

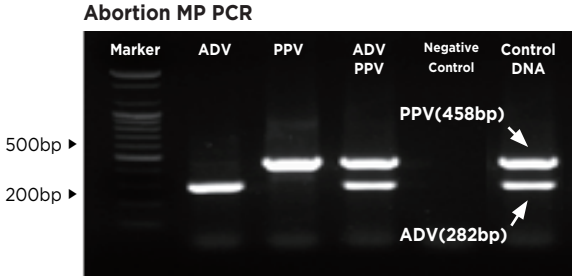
Virus	Taget gene	Size
EMCV	3D	286 bp
JEV	E	480 bp
Control DNA	-	286 bp, 480bp

Performance

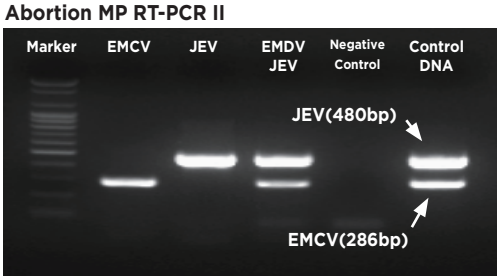
Test	Results
Analytical Sensitivity (LoD)	JEV Specimens : ≤ $10^{1.0}$ $TCID_{50}$/ml, JEV RNA : ≤ 10 copies/ul EMCV Specimens : ≤ $10^{1.0}$ $TCID_{50}$/ml, EMCV RNA : ≤ 10 copies/ul
Analytical Specificity (Cross-reaction)	No Cross-reactivity with PRRSV, CSFV, SIV, ADV, PPV, PCV2

Gel Electrophoresis

Abortion MP PCR



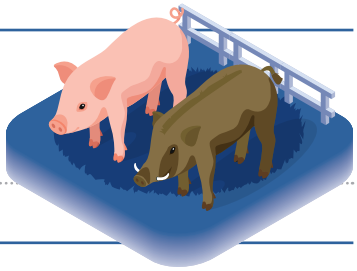
Abortion MP RT-PCR II



Order Information

Cat No.	Product Name	Quantity
NS-ABO-11	VDx® Abortion MP PCR (PPV/ADV)	50 Tests/Box
NS-ABO-12	VDx® Abortion MP RT-PCR II (EMCV/JEV)	50 Tests/Box

VDx® ASFV qPCR



African
Swine
Fever

African Swine Fever (ASF) is an infectious disease of domestic and wild pigs of all breeds and ages, caused by African Swine Fever Virus (ASFV). The clinical signs vary from peracute, acute, subacute to chronic, depending on the virulence of the virus. Acute form is characterised by high fever, haemorrhages in the reticuloendothelial system, and a high lethality.

VDx® ASFV qPCR is a real-time PCR based test for detection of ASFV DNA.

Introduction

+ **Target disease** : ASFV
+ **Species** : Swine and wild boar
+ **Specimens** : Blood, tissue, feces, livestock processed goods, and food wastes
+ **Target gene** : ASFV p72 gene

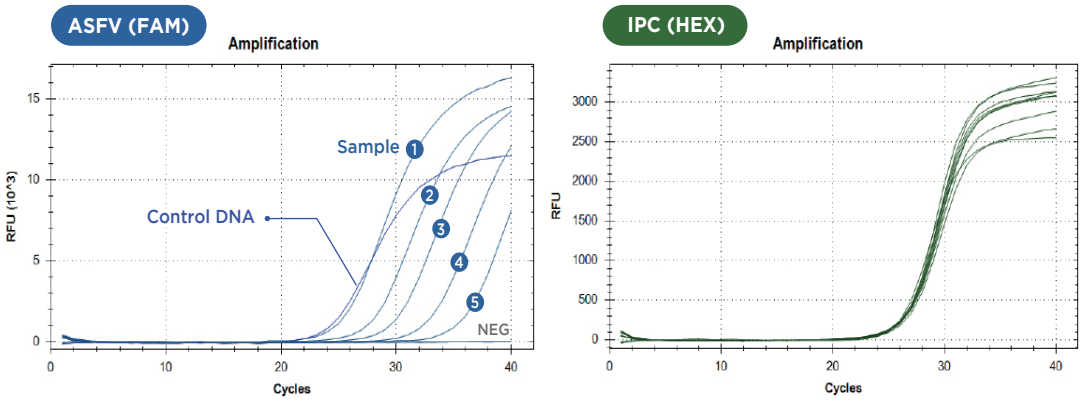
Target	Fluorophore	Quencher
ASFV	FAM	non-Fluorescent
IPC	HEX / VIC	non-Fluorescent

Features

+ Confirmatory diagnosis of ASFV
+ High sensitivity and specificity
+ High reproducibility and high repeatability
+ Most conserved p72 gene targeting for detecting all genotypes of ASFV

Test	Results
Analytical Sensitivity (LoD)	1 copy/ul $10^{1.62}$ HAD_{50}/ml (Genotype 2), 10^{0} HAD_{50}/ml (Genotype 9)
Analytical Specificity (Cross-reaction)	No Cross-reactivity with other pathogens (testing 19 kinds of bacteria and viruses including CSFV)
Clinical Sensitivity	100% (208/208)
Clinical Specificity	100% (550/550)

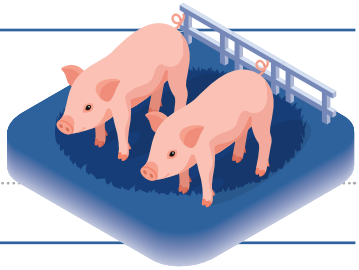
Technical data



Order Information

Cat No.	Product Name	Quantity
NS-ASF-31	VDx® ASFV qPCR	96 Tests/Box

VDx® ASFV/CSFV qRT-PCR



ASFV
CSFV

VDx® ASFV/CSFV qRT-PCR is a multiplex real-time RT-PCR based test for detection and identification of ASFV DNA and CSFV RNA.

Introduction

+ **Target disease** : CSFV & ASFV
+ **Species** : Swine
+ **Specimens** : Whole blood, serum and tissue homongenates
+ **Target gene** : ASFV p72 gene and CSFV 5'NCR gene

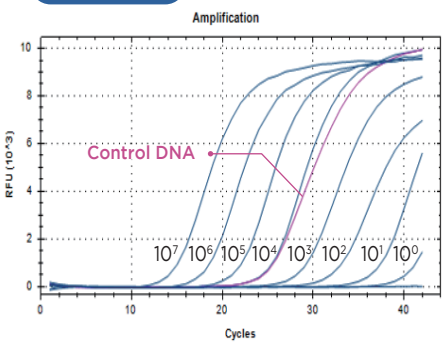
Target	Fluorophore	Quencher
CSFV	FAM	non-Fluorescent
ASFV	Texas Red	non-Fluorescent
IPC	HEX / VIC	non-Fluorescent

Performance

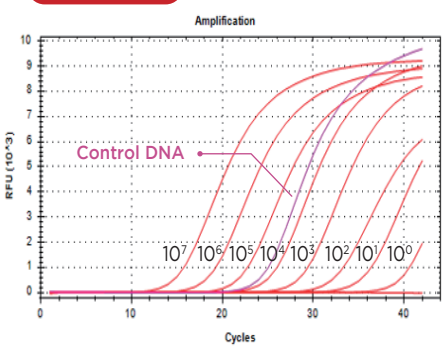
Test	Results
Analytical Sensitivity (LoD)	ASFV DNA : ≤ 10 copies/ul CSFV RNA : ≤ 10 copies/ul
Analytical Specificity (Cross-reaction)	No cross-reactivity with PRRSV, EMCV, JEV, SIV, ADV, PPV, PCV2, Mycoplasma hyopneumoniae, Actinobacillus pleuropneumoniae, Pasteurella multocida, Heamophilus parasuis, Salmonella typhimuium, Erysipelothrix rhusiopathiae, Sterptococcis suis, Staphlococcus aureus
Clinical Sensitivity	- ASFV : ASF-URL reference DNAs : 100% (21/21) Clinical field sample (positive 12ea, negative 4ea) : 100% (12/12) - CSFV : 100% (80/80)
Clinical Specificity	100% (90/90)

Technical data

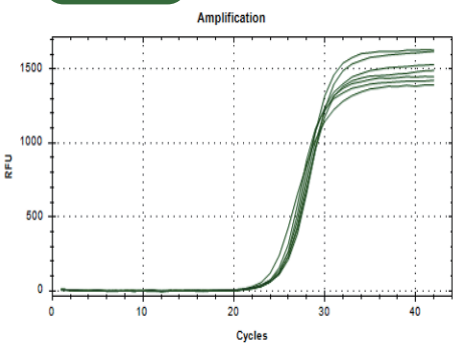
CSFV (FAM)



ASFV (TxR)



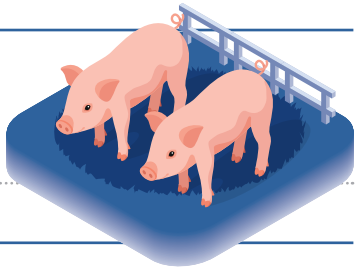
IPC (HEX)



Order Information

Cat No.	Product Name	Quantity
NS-ASF-32	VDx® ASFV/CSFV qRT-PCR	96 Tests/Box

VDx® CSFV Gene Diagnosis



Classical Swine Fever

Classical Swine Fever (CSF) is the first class legal notifiable communicable disease and a list disease as determined by OIE. It is highly infectious and also has a high fatality rate in swine. CSF is caused by Classical Swine Fever Virus (CSFV) and can be prevented through vaccination.

Product

VDx® CSFV 5'NCR RT - PCR

VDx® CSFV 5'NCR RT-PCR is a RT-PCR based test for detection of CSFV RNA.

Introduction

+ **Target disease** : CSFV
+ **Species** : Swine
+ **Target gene** : CSFV 5'NCR gene
+ **Specimens** : Whole blood, serum, semen and tissue homogenates

Virus	Taget gene	Size
CSFV	5'NCR	421 bp
Control DNA	-	309 bp

Features

Test	Results
Analytical Sensitivity (LoD)	RNA : ≤ 10 copies/ul, Virus : ≤ 10 $TCID_{50}$/ml
Analytical Specificity (Cross-reaction)	No cross reactivity with PRRSV, EMDV, JEV, SIV, ADV, PPV, PCV2

Product

VDx® CSFV qRT - PCR

VDx® CSFV qRT PCR is a real-time RT-PCR based test for detection of CSFV RNA.

Introduction

+ **Target disease** : CSFV
+ **Species** : Swine
+ **Target gene** : CSFV 5'NCR gene
+ **Specimens** : Whole blood, serum, semen and tissue homogenates

Target	Fluorophore	Quencher
CSFV	FAM	non-Fluorescent
IPC	HEX / VIC	non-Fluorescent

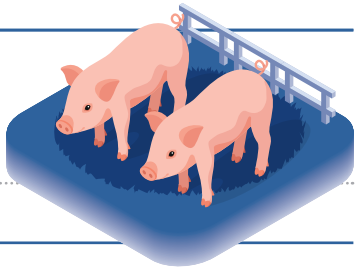
Performance

Test	Results
Analytical Sensitivity (Limit of Detection, LoD)	RNA : ≤ 10 copies/ul Virus : ≤ 10 $TCID_{50}$/ml
Analytical Specificity (Cross-reaction)	No Cross-reactivity with 7 other pathogens (PRRSV, EMCV, JEV, SIV, ADV, PPV, PCV2)
Clinical Sensitivity *Evaluation for CSF-APQA reference Lab	LOM strain (live vaccine) : 100% (186/186) Field isolate type2 (2016) : 100% (33/33)
Clinical Specificity	100% (90/90)

Order Information

Cat No.	Product Name	Quantity
NS-CSF-11	VDx® CSFV 5'NCR RT-PCR	50 Tests/Box
NS-CSF-31	VDx® CSFV qRT-PCR	96 Tests/Box

VDx® PCV2 Gene Diagnosis



Porcine Circovirus type 2 (PCV2)

Porcine Circovirus type 2 (PCV2) has been identified as the causal agent of post weaning multisystemic wasting syndrom (PMWS). PCV is a single-stranded DNA virus (class II), that is nonenveloped with an unsegmented circular genome.

Product

VDx® PCV2 ORF2 PCR

VDx® PCV2 ORF2 PCR is a PCR based test for detection of PCV2 DNA.

Introduction

+ **Target disease** : PCV2
+ **Species** : Swine
+ **Specimens** : Whole blood, serum, semen and tissue homogenates
+ **Target gene** : PCV2 ORF2 gene

Virus	Taget gene	Size
PCV2	ORF2	493 bp
Control DNA	-	317 bp

Performance

Test	Results
Analytical Sensitivity (LoD)	Specimens : ≤ 0.1 $TCID_{50}$/ml, DNA : ≤ 10 copies/ul
Analytical Specificity (Cross-reaction)	No Cross-reactivity with PRRSV, EMCV, JEV, SIV, ADV, PPV

Product

VDx® PCV2 qPCR

VDx® PCV2 qPCR is a real-time PCR based test for detection of PCV2 DNA.

Introduction

+ **Target disease** : PCV2
+ **Species** : Swine
+ **Specimens** : Whole blood, serum, semen and tissue homogenates
+ **Target gene** : PCV2 ORF1 gene

Target	Fluorophore	Quencher
PCV2	FAM	non-Fluorescent
IPC	HEX / VIC	non-Fluorescent

Performance

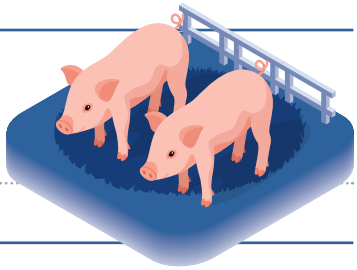
Test	Results
Analytical Sensitivity (LoD)	DNA : ≤ 10 copies/ul, Virus : ≤ 10^{-2} $TCID_{50}$/ml
Analytical Specificity (Cross-reaction)	No Cross-reactivity with PRRSV, EMCV, JEV, SIV, ADV, PPV, PCV2
Clinical Sensitivity	100% (187/187)
Clinical Specificity	100% (90/90)

Order Information

Cat No.	Product Name	Quantity
NS-PCV-11	VDx® PCV2 ORF2 PCR	50 Tests/Box
NS-PCV-31	VDx® PCV2 qPCR	96 Tests/Box

VDx® PEDV qRT-PCR (group1,2 dual)

Research Use Only



Porcine
Epidemic
Diarrhea

Porcine Epidemic Diarrhea Virus (PEDV) is an RNA virus belonging to corona virus. If acutely infected with PEDV, it is characterized by inducing vomiting and watery diarrhea regardless of the age of swine. Although the death rate is low as 1~3% range by recovering within one week after infection in case of grown swine, mortality is 50% in case of piglets and may be 100% in severe cases.

VDx® PEDV qRT-PCR is a multiplex real-time RT-PCR based test for detection and identification of PEDV RNA.

Introduction

+ **Target disease** : PEDV
+ **Species** : Swine
+ **Specimens** : Feces supernatant(10% dilution), tissue homogenates from pigs
+ **Target gene** : PEDV S gene

Target	Fluorophore	Quencher
PEDV group1	FAM	non-Fluorescent
PEDV group2	Texas Red/ROX	non-Fluorescent
IPC	HEX / VIC	non-Fluorescent

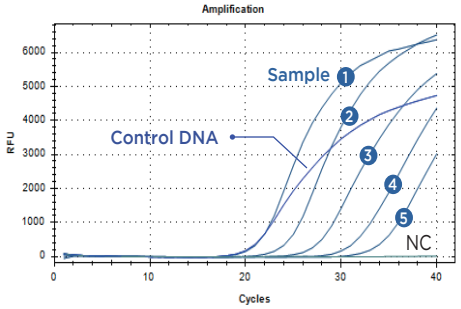
Features

+ Comfirmatory diagnosis of PED
+ Differential diagnosis of PEDV group1 and group2 strains

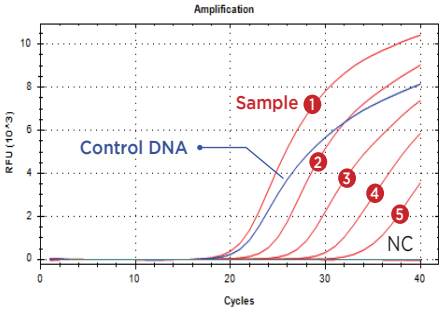
Test	Results
Analytical Sensitivity (LoD)	Group 1 RNA : 1 copy/ul, Group 2 RNA : 1 copy/ul PEDV group 1 : below 10^{-2} $TCID_{50}$/ml, PEDV group 2 : below 10^{-2} $TCID_{50}$/ml
Analytical Specificity (Cross-reaction)	No Cross-reactivity with PRRSV, EMCV, JEV, SIV, ADV, PPV, PCV2, TGEV, Rotavirus
Clinical Sensitivity	100% (94/94)
Clinical Specificity	100% (90/90)

Technical data

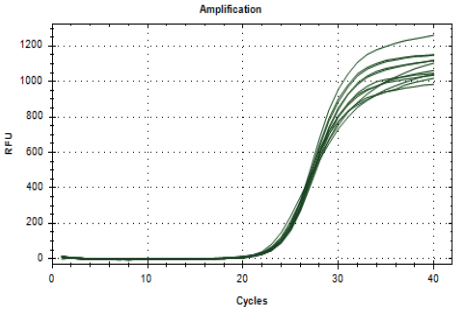
PEDV G1 (FAM)



PEDV G2 (TxR)



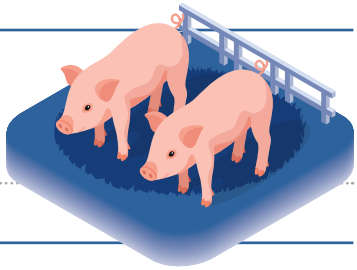
IPC (HEX)



Order Information

Cat No.	Product Name	Quantity
NS-PED-31	VDx® PEDV qRT-PCR(group1, 2 dual)	96 Tests/Box

VDx® PEDV S RT-PCR



Research Use Only

VDx® PEDV S RT-PCR is used for the detection and identification of viral RNA of Porcine Epidemic Diarrhea Virus (PEDV) by Reverse Transcription PCR method.

Introduction

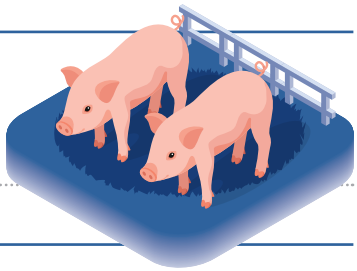
+ **Target disease** : PEDV
+ **Species** : Swine
+ **Specimens** : Stool and lesion tissue homogenates
+ **Target gene** : PEDV S gene

Virus	Taget gene	Size
PEDV	S	559 bp
Control DNA	-	222 bp

Order Information

Cat No.	Product Name	Quantity
NS-PED-11	VDx® PEDV S RT-PCR	50 Tests/Box

VDx® ADV qPCR



Research Use Only

Aujeszky's Disease

Swine Aujeszky's Disease is known as "Pseudorabies" and caused by **Aujeszky's Disease Virus (ADV)**. It belongs to the alphaherpesvirus and mainly infects the central nervous system and respiratory systems of animals.
VDx® ADV qPCR is used for the detection of viral DNA of Aujeszky's Disease Virus (ADV or pseudorabies virus) by real-time PCR method.

Introduction

+ **Target disease** : Aujeszky's Disease Virus (ADV or pseudorabies virus)
+ **Species** : Swine and Bovine
+ **Specimens** : Whole blood, serum and tissue homogenates
+ **Target gene** : ADV gD gene

Target	Fluorophore	Quencher
ADV	FAM	non-Fluorescent
IPC	HEX / VIC	non-Fluorescent

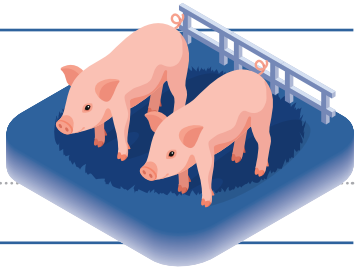
Introduction

+ ADV detection within 90 minutes for fast decision
+ Suitable for screening of ADV outbreak

Order Information

Cat No.	Product Name	Quantity
NS-ADV-31	VDx® ADV qPCR	96 Tests/Box

VDx® PRRSV Gene Diagnosis



Porcine Reproductive Respiratory Syndrome

Porcine Reproductive and Respiratory Syndrome (PRRS) is a disease characterized by reproductive disorder in pregnant pig, and respiratory disease in weaning pig and growing pig.

Product

VDx® PRRSV ORF7 RT - PCR

VDx® PRRSV ORF7 RT-PCR simultaneously amplifies the North American and European ORF7 genes of PRRSV.

Introduction

+ **Target disease** : PRRSV
+ **Species** : Swine
+ **Specimens** : Whole blood, serum, plasma, semen and tissue
+ **Target gene** : ORF7 gene of PRRSV NA/EU types

Virus	Taget gene	Size
PRRSV NA type	ORF7	433 bp
PRRSV EU type	ORF7	398 bp
Control DNA	-	756 bp

Performance

Test	Results
Analytical Sensitivity (LoD)	Specimens: ≤ 0.1 $TCID_{50}$/ml, RNA: ≤ 10 copies/ul
Analytical Specificity (Cross-reaction)	No Cross-reactivity with EMCV, JEV, CSFV, SIV, ADV, PPV, PCV2

Product

VDx® PRRSV HP MP RT-PCR

VDx® PRRSV HP MP RT-PCR simultaneously amplifies the North American and European ORF7 genes of PRRSV and specifically amplifies Chinese High Pathogen PRRSV.

Introduction

+ **Target disease** : PRRSV and Chinese High Pathogen PRRSV
+ **Species** : Swine
+ **Specimens** : Whole blood, serum, plasma, semen and tissue
+ **Target gene** : ORF7 gene of PRRSV NA/EU types and ORF7
  ORF1 gene of Chinese High Pathogen PRRSV types

Virus	Taget gene	Size
PRRSV NA type	ORF7	433 bp
PRRSV EU type	ORF7	398 bp
Chinese High Pathogen types	ORF7	433 bp
	ORF1	273 bp
Control DNA	-	756 bp

Performance

Test	Results
Analytical Sensitivity (LoD)	Specimens : ≤ 0.1 $TCID_{50}$/ml, RNA : ≤ 10 copies/ul
Analytical Specificity (Cross-reaction)	No Cross-reactivity with EMCV, JEV, CSFV, SIV, ADV, PPV, PCV2

Product

VDx® PRRSV NA / EU Typing Nested PCR

When the amount of virus is small due to the characteristics of sample tests, **VDx® PRRSV NA/EU Typing Nested PCR** with superior sensitivity can be used to confirm and the test can be conducted by separating the two (NA/EU) genotypes of PRRSV on purpose.

Introduction

+ **Target disease** : PRRSV
+ **Species** : Swine
+ **Sample** : 1st PRRSV RT-PCR product
+ **Target gene** : PRRSV ORF7 gene

Virus	Taget gene	Size
PRRSV NA type	ORF7	287 bp
PRRSV EU type	ORF7	184 bp

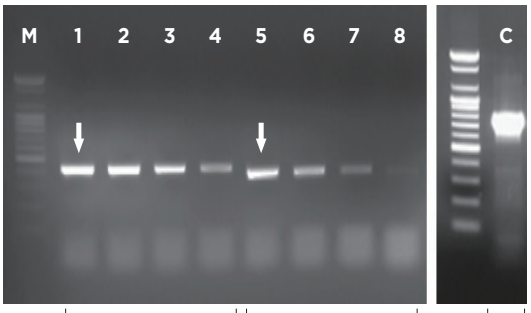
Performance

Test	Results
Analytical Sensitivity (LoD)	Specimens : ≤ 0.1 $TCID_{50}$/ml, RNA : ≤ 10 copies/ul
Analytical Specificity (Cross-reaction)	No Cross-reactivity with EMCV, JEV, CSFV, SIV, ADV, PPV, PCV2

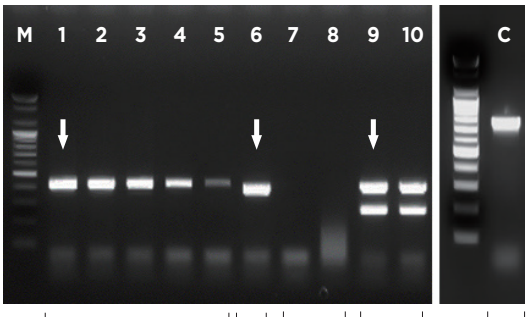
Technical Data

Samples that are blurred or not visible in positive samples by 1st PRRSV RT-PCR (Cat No. NS-PRR-11 & NS-PRR-13) can be clearly identified in nested PCR (Cat No. NS-PRR-12).
However, when the first PRRSV RT-PCR product is densed and reacted to nested PCR, the first RT-PCR product is partially re-PCRed and a nonspecific size band may be observed.

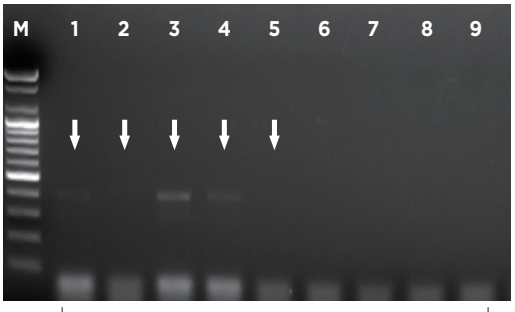
PRRSV ORF7 RT-PCR



PRRSV (HP) MP RT-PCR

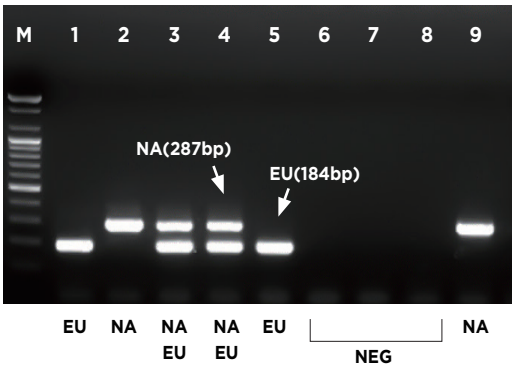


PRRSV RT-PCR (Cat No. NS-PRR-11 or NS PRR-13)



Nested PCR

PRRSV NA/EU typing Nested PCR (Cat No. NS-PRR-12)



Order Information

Cat No.	Product Name	Quantity
NS-PRR-11	VDx® PRRSV ORF7 RT-PCR	50 Tests/Box
NS-PRR-13	VDx® PRRSV HP MP RT-PCR	50 Tests/Box
NS-PRR-12	VDx® PRRSV NA/EU Typing Nested PCR	50 Tests/Box

Product

VDx® PRRSV qRT - PCR

VDx® PRRSV qRT-PCR is used for the detection and NA/EU strains identification of viral RNA of PRRSV by multiplex real time RT-PCR method.

Introduction

+ **Target disease** : PRRSV
+ **Species** : Swine
+ **Specimens** : Whole blood, serum, semen and tissue homogenates
+ **Target gene** : PRRSV ORF6 gene

Target	Fluorophore	Quencher
PRRSV_NA	FAM	non-Fluorescent
PRRSV_EU	Texas Red/ROX	non-Fluorescent
IPC	HEX / VIC	non-Fluorescent

Performance

Test	Results
Analytical Sensitivity (LoD)	RNA : ≤ 1 copies/ul, PRRSV NA strain virus : ≤ 10^{-2} $TCID_{50}$/ml PRRSV EU strain virus : ≤ 10^{-2} $TCID_{50}$/ml
Analytical Specificity (Cross-reaction)	No Cross-reactivity with EMCV, JEV, SIV, ADV, PPV, PCV2
Clinical Sensitivity	100% (94/94) vs PRRSV ORF7 RT-PCR *Genotyping 100% match!
Clinical Specificity	100% (90/90)

Product

VDx® PRRSV / PCV2 qRT - PCR

VDx® PRRSV / PCV2 qRT-PCR is multiplex real-time PCR based test for the detection and NA/EU strains identification of PRRSV RNA and PCV2 DNA.

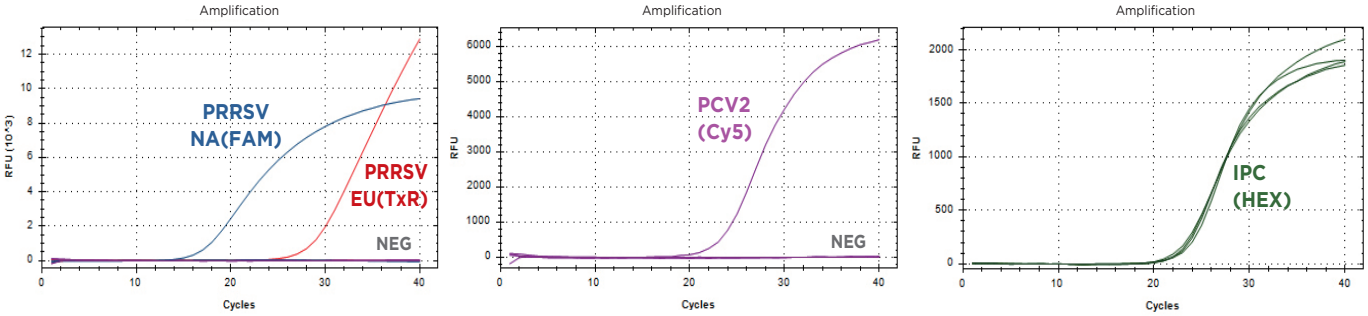
Introduction

+ **Target disease** : PRRSV and PCV2
+ **Species** : Swine
+ **Specimens** : Whole blood, serum, semen and tissue homogenates
+ **Target gene** : PRRSV ORF6 gene and PCV2 ORF1 gene

Target	Fluorophore	Quencher
PRRSV_NA	FAM	non-Fluorescent
PRRSV_EU	Texas Red/ROX	non-Fluorescent
PCV2	Cy5	non-Fluorescent
IPC	HEX / VIC	non-Fluorescent

Performance

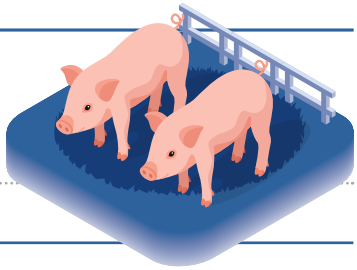
Test	Results
Analytical Sensitivity (LoD)	RNA : ≤ 10 copies/ul, DNA : ≤ 10 copies/ul PRRSV NA strain virus : ≤ 10^{-2} $TCID_{50}$/ml, PRRSV EU strain virus : ≤ 10^{-2} $TCID_{50}$/ml PCV2 virus : ≤ 10^{-2} $TCID_{50}$/ml
Analytical Specificity (Cross-reaction)	No Cross-reactivity with EMCV, JEV, SIV, ADV, PPV, PEDV, TGEV, Rota
Clinical Sensitivity	PRRSV NA strain : 94.3%, PRRSV EU starin : 92.3% PCV2 : 100%
Clinical Specificity	100% (90/90)



Order Information

Cat No.	Product Name	Quantity
NS-PRR-31	VDx® PRRSV qRT-PCR	96 Tests/Box
NS-PRP-31	VDx® PRRSV/PCV2 qRT-PCR	96 Tests/Box

VDx® SIV Gene Diagnosis



Swine Influenza

Swine Influenza is an infection caused by any one of several types of swine influenza viruses. In pigs, four influenza A virus subtypes (H1N1, H1N2, H3N2 and H7N9) are the most common strains worldwide. First described in April 2009, the 2009 swine flu pandemic virus appeared to be a new strain of H1N1 that resulted from a previous triple reassortment of bird, swine, and human flu viruses and that further combined with a Eurasian pig flu virus, leading to the term “Swine Flu”.

Product

VDx® SIV RT - PCR

VDx® SIV RT PCR is used for the detection of viral RNA of Swine Influenza Virus(SIV) by RT-PCR method.

Introduction

+ **Target disease** : SIV
+ **Species** : Swine
+ **Specimens** : Whole blood, serum, semen and tissue homogenates
+ **Target gene** : SIV M gene

Virus	Taget gene	Size
SIV	M	244 bp
Control DNA	-	575 bp

Performance

Test	Results
Analytical Sensitivity (LoD)	Specimens : ≤ 10^0 $TCID_{50}$/ml, RNA : ≤ 10 copies/ul
Analytical Specificity (Cross-reaction)	No Cross-reactivity with PRRSV, EMCV, JEV, CSFV, ADV, PPV, PCV2

Product

VDx® SIV NF MP RT - PCR

VDx® SIV NF MP is used for the detection of SIV common and SIV Newflu by multiplex RT-PCR method.

Introduction

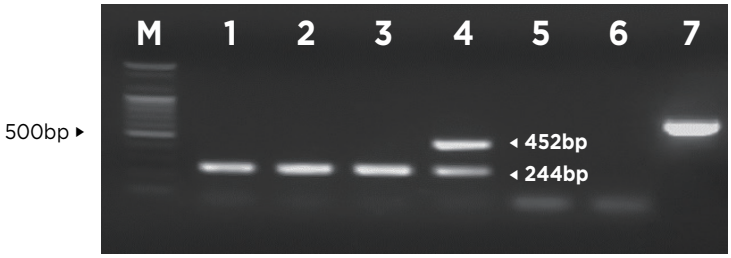
+ **Target disease** : SIV and SIV Newflu(H1N1)
+ **Species** : Swine
+ **Specimens** : Whole blood, serum, semen and tissue homogenates
+ **Target gene** : SIV M gene(A type common) / SIV Newflu M gene

Virus	Taget gene	Size
SIV common	M	244 bp
SIV Newflu	M	452 bp
Control DNA	-	575 bp

Performance

Test	Results
Analytical Sensitivity (LoD)	Specimens : ≤ 10^0 $TCID_{50}$/ml, RNA : ≤ 100 copies/ul
Analytical Specificity (Cross-reaction)	No Cross-reactivity with PRRSV, EMCV, JEV, CSFV, ADV, PPV, PCV2

Gel Electrophoresis

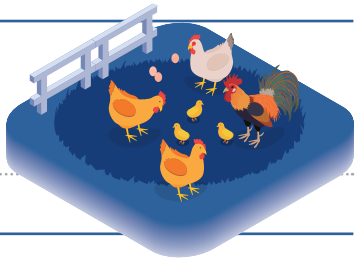


- M : Size Marker
- 1 : SIV H1N1
- 2 : SIV H1N2
- 3 : SIV H3N2
- 4 : SIV H1N1 Newflu
- 5 : SIV Negative
- 6 : SIV Negative
- 7 : Control DNA

Order Information

Cat No.	Product Name	Quantity
NS-SIV-11	VDx® SIV RT-PCR	50 Tests/Box
NS-SIV-12	VDx® SIV NF MP RT-PCR	50 Tests/Box

VDx® Fowl Typhoid Typing PCR



Fowl Typhoid and Pullorum Disease

VDx® Fowl Typhoid Typing PCR is used for the detection and identification of *Salmonella enterica* serovar Gallinarum biovars Gallinarum and Pullorum and the biovar Gallinarum live vaccine strain 9R and SR2-N6 by multiplex PCR method.

Introduction

+ **Target disease** : Fowl typhoid and pullorum disease
+ **Species** : Poultry
+ **Template preparation** : Several colonies of bacteria on agar plates, which originated from one single colony in the beginning, were picked with a sterile toothpick and inoculated into 100ul of TE buffer in a microcentrifuge tube. The cell suspension was boiled in a water bath for 5 min and then briefly centrifuged to pellet cell debris. The supernatant was transferred to a new tube and used as the PCR template.
+ **Target gene** : *Salmonella* Pullorum (SP), *Salmonella* Gallinarum (SG), *Salmonella* Gallinarum 9R, *Salmonella* Gallinarum SR2-N6

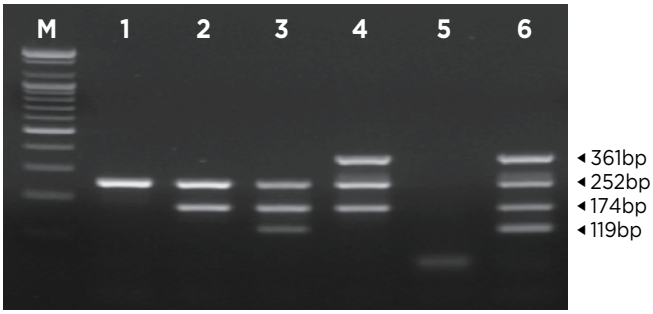
Virus	Band size			
SP	-	-	252 bp	-
SG	-	174 bp	252 bp	-
SG-9R	119 bp	174 bp	252 bp	-
SG-SR2-N6		174 bp	252 bp	361 bp
Control DNA	119 bp	174 bp	252 bp	361 bp

Performance

Test	Results
Analytical Sensitivity (LoD)	Purified plasmid DNA : ≤ 0.01 pg/ul (2.0 x 10^3 copies/ul), Specimens Total DNA : 100 pg/ul
Analytical Specificity (Cross-reaction)	No Cross-reactivity with *Sal. Typhimurium, Sal. Agona, Sal. Blockley, Sal. Heidelberg, Sal. Montevideo, Sal. Muenchen, Sal. Mbandaka, Sal. Newport, Sal. Senftenberg, Sal. Tennessee, Sal. Virchow, Sal. Enteritidis, E. coli*

Gel Electrophoresis

*2.0% Agarose gel

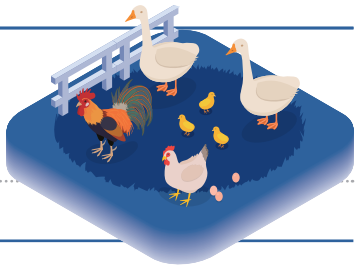


- M : Size Marker
- 1 : *Salmonella* Pullorum(SP)
- 2 : *Salmonella* Gallinarum(SG)
- 3 : *Salmonella* Gallinarum - 9R
- 4 : *Salmonella Gallinarum* SR2-N6
- 5 : Negative control
- 6 : Control DNA

Order Information

Cat No.	Product Name	Quantity
NP-FTI-11	VDx® Fowl Typhoid Typing PCR	50 Tests/Box

VDx® AIV Gene diagnosis



Avian Influenza

Avian Influenza Virus (AIV) is a disease caused by poultry, and it has various mortality rates depending on the pathogenicity. In the case of Highly Pathogenic Avian Influenza (HPAI), massive death occurs. Respiratory symptoms and neurological symptoms, egg laying rate in the laying hens, and symptoms of poor quality of the eggs, resulting in enormous economic damage.

VDx® AIV qRT-PCR products are used for detection and identification of viral RNA of AIV by real-time PCR method.

Features

VDx® AIV qRT-PCR

+ Target disease: AIV
+ Confirmatory diagnosis of AIV
+ Suitable for screening of AIV outbreak
+ AIV detection within 120 minutes for fast decision
+ High sensitivity and specificity
+ High reproducibility and high repeatability

Product

VDx® AIV M qRT-PCR Ver 2.1

VDx® AIV M qRT-PCR is used for the detection of viral RNA of AIV by real-time PCR method.

Introduction

+ **Target disease** : AIV
+ **Species** : Avian (chicken, duck)
+ **Specimens** : Stool, tissue homogenates (lung, spleen, tonsil), Oral swab, Virus culture
+ **Target gene** : AIV M gene (Common)

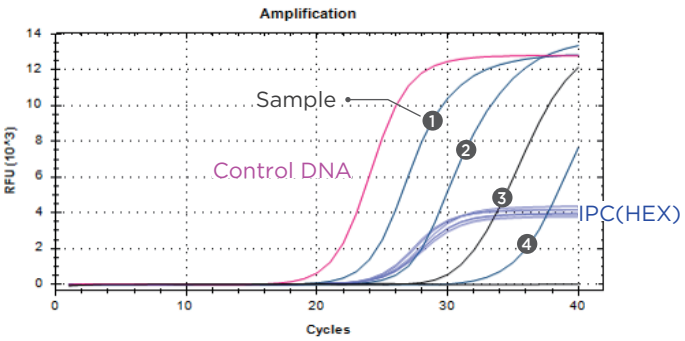
Target	Fluorophore	Quencher
AIV	FAM	non-Fluorescent
IPC	HEX / VIC	non-Fluorescent

Performance

+ Limit of Detection (LoD) : RNA 5 copies/ul
+ No-cross reactivity with other avian pathogens (NDV, IBV, IBDV, DHV, MG, MS, ST, SE, SG, SP etc.)
+ All 69 isolates of AIV H1~H11 serotypes confirmed positive
+ Clinical Sensitivity : 96.5%
+ Clinical Specificity : 99.6%

Technical Data

AIV M (FAM)



Product

VDx® AIV H9 qRT-PCR *Research Use Only

VDx® AIV H9 qRT-PCR is used for the detection of viral RNA of AIV H9 type by real-time PCR method.

Introduction

+ **Target disease** : AIV H9 type
+ **Target gene** : AIV H9 (HA) gene
+ **Species** : Avian (chicken, duck)
+ **Specimens** : Stool, tissue homogenates (lung, spleen, tonsil), Oral swab, Virus culture

Product

VDx® AIV H5 qRT - PCR Ver 2.1

VDx® AIV H5 qRT-PCR is used for the detection of viral RNA of AIV H5 type by real-time PCR method.

Introduction

+ **Target disease** : AIV H5 type
+ **Target gene** : AIV H5 (HA) gene
+ **Species** : Avian (chicken, duck)
+ **Specimens** : Stool, tissue homogenates (lung, spleen, tonsil), Oral swab, Virus culture

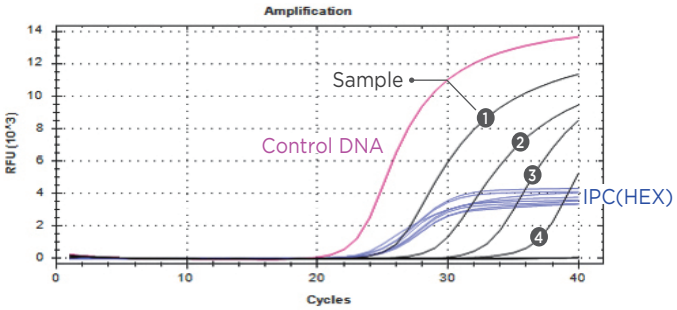
Target	Fluorophore	Quencher
AIV H5	FAM	non-Fluorescent
IPC	HEX / VIC	non-Fluorescent

Performance

+ Limit of Detection (LoD) : RNA 10 copies/ul
+ No-cross reactivity with other avian pathogens (NDV, IBV, IBDV, DHV, MG, MS, ST, SE, SG, SP etc.)
+ H5 serotype can specific detection
+ Clinical Sensitivity : 98.1%
+ Clinical Specificity : 99.8%

Technical Data

AIV H5 (FAM)



Product

VDx® AIV H7 qRT-PCR Ver 2.1

VDx® AIV H7 qRT-PCR is used for the detection of viral RNA of AIV H7 type by real-time PCR method.

Introduction

+ **Target disease** : AIV H7 type
+ **Target gene** : AIV H7 (HA) gene
+ **Species** : Avian (chicken, duck)
+ **Specimens** : Stool, tissue homogenates (lung, spleen, tonsil), Oral swab, Virus culture

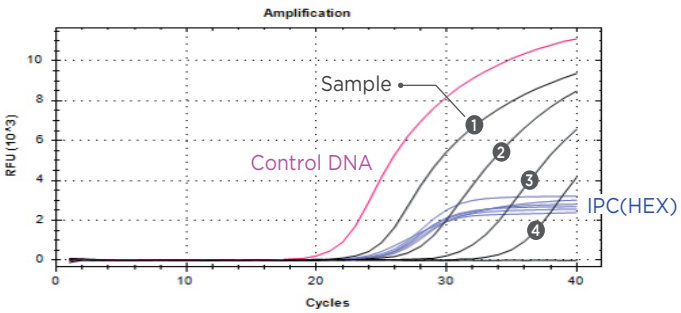
Target	Fluorophore	Quencher
AIV H7	FAM	non-Fluorescent
IPC	HEX / VIC	non-Fluorescent

Performance

+ Limit of Detection (LoD) : RNA 5 copies/ul
+ No-cross reactivity with other avian pathogens (NDV, IBV, IBDV, DHV, MG, MS, ST, SE, SG, SP etc.)
+ H7 serotype can specific detection
+ Clinical Sensitivity : 94.3%
+ Clinical Specificity : 100.0%

Technical Data

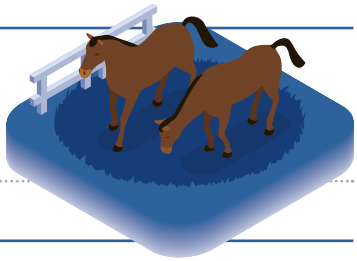
AIV H7 (FAM)



Order Information

Cat No.	Product Name	Quantity
NP-AIV-38	VDx® AIV M qRT-PCR	96 Tests/Box
NP-AIV-39	VDx® AIV H5 qRT-PCR	96 Tests/Box
NP-AIV-3A	VDx® AIV H7 qRT-PCR	96 Tests/Box
NP-AIV-34	VDx® AIV H9 qRT-PCR	96 Tests/Box

VDx® CEM qPCR



Contagious Equine Metritis(CEM)

Contagious Equine Metritis (CEM) is a type of metritis (uterine inflammation) in horses that is caused by a sexually transmitted infection. It is thus an equine venereal disease of the genital tract of horses, brought on by the *Taylorella equigenitalis* bacteria and spread through sexual contact.
VDx® CEM qPCR is used for the detection of *Taylorella equigenitalis* by real-time PCR method. *Taylorella equigenitalis* is the causative agent of CEM.

Introduction

+ **Target disease** : TE (*Taylorella equigenitalis*)
+ **Species** : Equine
+ **Specimens** : Genital swab
+ **Target gene** :TE 16s rDNA gene

Target	Fluorophore	Quencher
TE	FAM	non-Fluorescent
IPC	HEX / VIC	non-Fluorescent

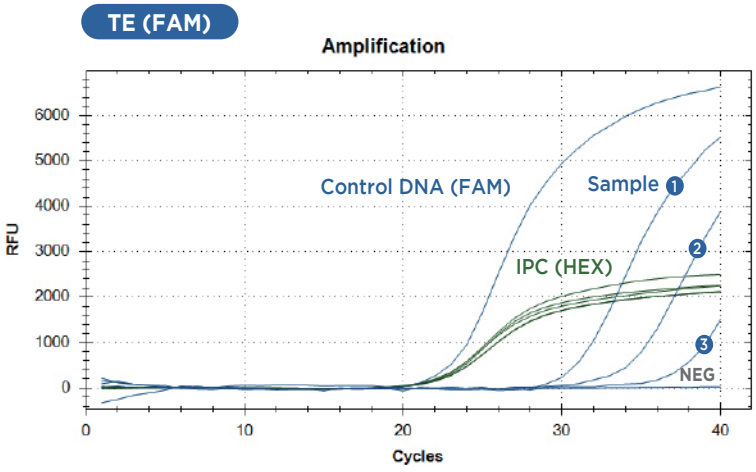
Features

+ Comfirmatory diagnosis of CEM
+ Suitable for screening of CEM outbreak

Performance

Test	Results
Analytical Sensitivity (LoD)	DNA : ≤ 10 copies/ul
Analytical Specificity (Cross-reaction)	No Cross-reactivity with KP, PA, TA, SZ, JEV, Influenza etc.
Clinical Sensitivity	95.9% (71/74)
Clinical Specificity	94.9% (150/158)

Technical Data



Order Information

Cat No.	Product Name	Quantity
NH-CEM-31	VDx® CEM qPCR	96 Tests/Box

MEDIAN Diagnostics Product List

VDPro® ELISA Kit

Species	Cat No.		Product Name	Quantity
Ruminant	EB-BRU-01		VDPro® Brucella AB ELISA	192 Tests, 480 Tests/Box
	EB-BLV-01		VDPro® Bovine Leukosis Ab b-ELISA	192 Tests, 480 Tests/Box
	EB-BTB-01		VDPro® Bovine Tuberculosis AB ELISA	192 Tests, 480 Tests/Box
	EB-BVD-01		VDPro® BVDV AB ELISA	192 Tests, 480 Tests/Box
	EM-FMD-01	Foot and Mouth Disease *DIVA	VDPro® FMDV NSP AB ELISA	192 Tests, 480 Tests/Box
	EM-FMD-02		VDPro® FMDV Type O ELISA	192 Tests, 480 Tests/Box
	EM-FMD-03		VDPro® FMDV Type A AB ELISA	192 Tests, 480 Tests/Box
	EM-FMD-04		VDPro® FMDV Type Asia1 AB ELISA	192 Tests, 480 Tests/Box
	EM-FMD-06		VDPro® FMDV/SVA Ag ELISA	96 Tests/Box
Swine	ES-ASF-05	Systemic Disease	VDPro® ASFV Ab i-ELISA ver2.0	192 Tests, 480 Tests/Box
	ES-CSF-02		VDPro® CSFV Ab c-ELISA (*blocking ELISA)	192 Tests, 480 Tests/Box
	ES-CSF-03		VDPro® CSFV AG ELISA	192 Tests/Box
	ES-PCV-01		VDPro® PCV2 AB ELISA	192 Tests, 480 Tests/Box
	ES-ADV-01	Reproductive Failure Disease (RFD)	VDPro® ADV AB Screen ELISA (*DIVA)	192 Tests, 480 Tests/Box
	ES-ADV-02		VDPro® ADV gI AB ELISA (*DIVA)	192 Tests, 480 Tests/Box
	ES-JEV-01		VDPro® Japanese Encephalitis AB ELISA	192 Tests, 480 Tests/Box
	ES-AP2-01	Respiratory Disease (RD)	VDPro® APP2 AB ELISA	192 Tests, 480 Tests/Box
	ES-AP5-01		VDPro® APP5 AB ELISA	192 Tests, 480 Tests/Box
	ES-HPA-01		VDPro® HP AB ELISA	192 Tests, 480 Tests/Box
	ES-MHY-01		VDPro® MH AB ELISA	192 Tests, 480 Tests/Box
	ES-PRR-03	RFD & RD	VDPro® PRRSV AB ELISA	192 Tests, 480 Tests/Box
Poultry	EP-AIV-01		VDPro® AIV AB ELISA	192 Tests, 480 Tests/Box
	EP-IBD-01		VDPro® IBDV AB ELISA	192 Tests, 480 Tests/Box
	EP-IBV-01		VDPro® IBV AB ELISA	192 Tests, 480 Tests/Box
	EP-MSY-01		VDPro® MS AB ELISA	192 Tests, 480 Tests/Box
	EP-NDV-01		VDPro® NDV AB ELISA	192 Tests, 480 Tests/Box

***DIVA**: Differentiating Infected from Vaccinated Animals

MEDIAN Diagnostics Product List

VDRG® / VDRF® Rapid Kit

	Species	Cat. No.	Product Name	Quantity
Companion Animal	Canine	PC-CCV-11	VDRG® CCV Ag Rapid kit	10 Tests/Box
		PC-CPV-11	VDRG® CPV Ag Rapid kit	10 Tests/Box
		PC-CCP-12	VDRG® CCV/CPV Ag Rapid kit	10 Tests/Box
		PC-CCG-11	VDRG® CPV/CCV/Giardia Ag Rapid kit	10 Tests/Box
		PC-CDV-11	VDRG® CDV Ag Rapid kit	10 Tests/Box
		PC-CHW-11	VDRG® CHW Ag Rapid kit	10 Tests/Box
		PC-CIV-11	VDRG® CIV Ag Rapid kit	10 Tests/Box
		PC-ECA-11	VDRG® E.Canis Ab Rapid kit	10 Tests/Box
		PC-LEI-11	VDRG® Leishmania Ab Rapid kit	10 Tests/Box
	Feline	PF-FIV-11	VDRG® FIV Ab Rapid kit	10 Tests/Box
		PF-FEL-11	tVDRG® FeLV Ag Rapid kit	10 Tests/Box
		PF-FEI-11	VDRG® FeLV Ag/FIV Ab Rapid kit	10 Tests/Box
		PF-FPV-11	VDRG® FPV Ag Rapid kit	10 Tests/Box
		PF-FCV-13	VDRG® FCoV Ag Rapid kit	10 Tests/Box
		PF-FPC-12	VDRG® FPV/FCoV Ag Rapid kit	10 Tests/Box
		PF-TXP-11	VDRG® Toxoplasma Ab Rapid kit	10 Tests/Box
	Canine & Feline	PC-GID-11	VDRG® Giardia Ag Rapid kit	10 Tests/Box
Livestock Animal	Ruminant	PB-BRU-11	VDRG® Bovine Brucella Ab Rapid Kit	10 Tests/Box
		PB-BD5-11	VDRG® BoviDia 5 Ag Rapid kit	10 Tests/Box
		PB-BLV-11	VDRG® BLV Ab Rapid kit	10 Tests/Box
		PM-FMD-15	VDRG® FMDV PAN Ag Rapid kit	10 Tests/Box
		PM-FMD-16	VDRG® FMDV 3Diff/PAN Ag Rapid kit	10 Tests/Box
	Swine	PS-ASF-11	VDRF® ASFV Ag Rapid kit	30 Tests/Box
		PS-PED-11	VDRG® PEDV Ag Rapid Kit	10 Tests/Box
		PS-ROT-11	VDRG® ROTA Ag Rapid Kit	10 Tests/Box
		PS-TGE-11	VDRG® TGEV Ag Rapid Kit	10 Tests/Box
	Poultry	PP-AIV-12	VDRG® AIV Ag Rapid kit 2.0	30 Tests/Box

MEDIAN Diagnostics Product List

VDx® Conventional PCR & Real-time PCR Kit

Species	Cat No.		Product Name	Quantity
Ruminant	NB-BLV-11	BLV	VDx® BLV PCR	50 Tests/Box
	NB-BLV-12		VDx® BLV nested PCR	50 Tests/Box
	NB-BLV-31		VDx® BLV qPCR	96 Tests/Box
	NB-BVD-31		VDx® BVDV qRT-PCR(type1,2 dual)	96 Tests/Box
	NM-FMD-31		VDx® FMDV qRT-PCR	96 Tests/Box
	NM-FMD-32		VDx® FMDV O qRT-PCR	96 Tests/Box
	NM-FMD-33		VDx® FMDV A qRT-PCR	96 Tests/Box
	NM-FMD-34		VDx® FMDV Asia1 qRT-PCR	96 Tests/Box
	NM-ROT-11		VDx® Rotavirus VP6 RT-PCR	50 Tests/Box
Swine	NS-ABO-11	Abortion	VDx® Abortion MP PCR (PPV/ADV)	50 Tests/Box
	NS-ABO-12		VDx® Abortion MP RT-PCR II (EMCV/JEV)	50 Tests/Box
	NS-ADV-31		VDx® ADV qPCR	96 Tests/Box
	NS-ASF-31	ASFV	VDX® ASFV qPCR	96 Tests/Box
	NS-ASF-32		VDX® ASFV/CSFV qRT-PCR	96 Tests/Box
	NS-CSF-11	CSFV	VDx® CSFV 5'NCR RT-PCR	50 Tests/Box
	NS-CSF-31		VDx® CSFV qRT-PCR	96 Tests/Box
	NS-PCV-11	PCV2	VDx® PCV2 ORF2 PCR	50 Tests/Box
	NS-PCV-31		VDx® PCV2 qPCR	96 Tests/Box
	NS-PED-11	PEDV	VDx® PEDV S RT-PCR	50 Tests/Box
	NS-PED-31		VDx® PEDV qRT-PCR(group 1,2 dual)	96 Tests/Box
	NS-PRR-11	PRRSV	VDx® PRRSV ORF7 RT-PCR	50 Tests/Box
	NS-PRR-12		VDx® PRRSV NA/EU Typing Nested PCR	50 Tests/Box
	NS-PRR-13		VDx® PRRSV HP MP RT-PCR	50 Tests/Box
	NS-PRR-31		VDx® PRRSV qRT-PCR	96 Tests/Box
	NS-PRP-31		VDx® PRRSV/PCV2 qRT-PCR	96 Tests/Box
	NS-SIV-11	SIV	VDx® SIV RT-PCR	50 Tests/Box
	NS-SIV-12		VDx® SIV NF MP RT-PCR	50 Tests/Box
Poultry	NP-AIV-34	AIV	VDx® AIV H9 qRT-PCR	96 Tests/Box
	NP-AIV-38		VDx® AIV M qRT-PCR Ver2.1	96 Tests/Box
	NP-AIV-39		VDx® AIV H5 qRT-PCR Ver2.1	96 Tests/Box
	NP-AIV-3A		VDx® AIV H7 qRT-PCR Ver2.1	96 Tests/Box
	NP-FTI-11		VDx® Fowl Typhoid Dif PCR	50 Tests/Box
Equine	NH-CEM-31		VDx® CEM qPCR	96 Tests/Box

MEDIAN
Diagnostics

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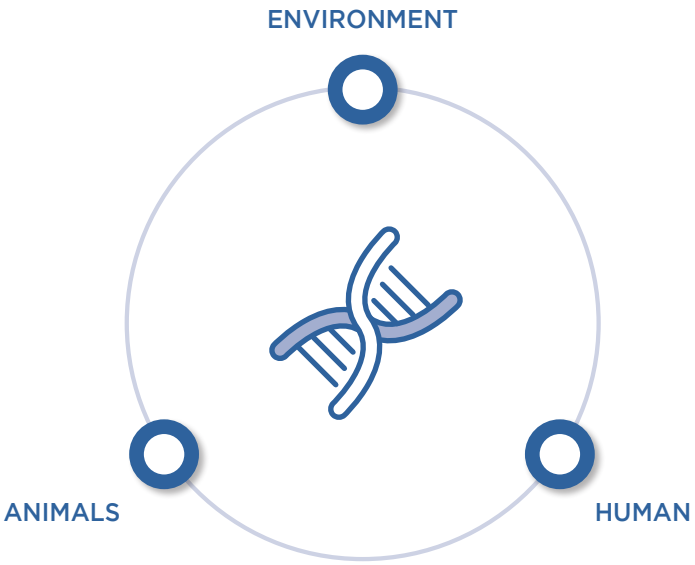

"For One Health"

MEDIAN Diagnostics

HEAD OFFICE : 878, Sunhwan-daero, Dongnae-myeon, Chuncheon-si, Gangwon-do, KOREA
TEL. +82-33-244-0100 **FAX.** +82-33-244-4634
SEOUL OFFICE : C-1114, SK V1 GL Metrocity, 128, Beobwon-ro, Songpa-gu, Seoul, KOREA
TEL. +82-2-3401-0110 **FAX.** +82-2-3401-0112 **E-MAIL** median@mediandx.com **HOME PAGE** www.mediandiagnostics.com