



Diagnostic tests and services to monitor the health of livestock and poultry

MEDIAN Diagnostics Inc.

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MEDIAN Diagnostics

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Veterinary Diagnostic Technology Specialists
MEDIAN Diagnostics Inc.

Although it has been an arduous journey, thanks to the unconditional support over the last 10 years, MEDIAN Diagnostics has continued to maintain focus on steady production and continued technological developments in the field of veterinary diagnosis. We will continue to strive in providing our clients with products using the latest, most advanced technologies available.

History

- 1999. 10** Founded Jenio Biotech Inc.
- 2001. 02** Drug manufacturing license for animals
(National Veterinary Research and Quarantine Service No. 107)
- 2001. 02** CSFV antibody test ELISA item permission
(The nation's first veterinary external diagnostic medicine)
- 2003. 05** Research laboratory certification
(Korea Institute of Industrial Technology Association No. 20031420)
- 2003. 10** ISO9001: 2000 Certification (DQS DE-287195QM)
- 2005. 01** Promising Export SME selected by Small and Medium Business Administration
(Small and Medium Business Administration 2005-2007)
- 2006. 03** Developed and obtained an item permission on foot-and-mouth disease virus
NSP antibody test ELISA for the third time in the world
- 2006. 12** Developed the World's first Swine Fever Virus (CSFV) gene chip diagnostic technology
- 2008. 06** Technology innovative SME certification
(Innobiz, Small and Medium Business Administration)
- 2010. 05** Moved to newly constructed Chuncheon G-Tech Village Factory
- 2010. 11** ISO9001: 2008 Certification (DQS DE-287195 QM08)
- 2011. 04** Acquired and merged with Boreda Biotech Inc.
- 2011. 07** Company name changed to Median Diagnostics Inc.
- 2014. 05** Moved to an expanded office

Award

- 2004. 12** Awarded Chuncheon Bio Venture Company Grand Prize (Chuncheon city)
- 2005. 12** Awarded Gangwon Province SME entrepreneur grand prize
(Small Business Administration)
- 2007. 01** Honored as a 2006 Excellence in Business Company
(Chuncheon Bio-Industry Development Institute)
- 2007. 03** Awarded at the Commerce and Industry Business People's Day
(Small Business Corporation, Gangwon)
- 2009. 05** President's Award to the CEO (Ministry of Knowledge and Economy)
- 2011. 05** Excellent task performance Award (University Industrial Technology Force)
- 2013. 03** Honored with the Commerce and Industry Business People's Day Award
(Small Business Corporation, Gangwon)



Innovative, Valuable
MEDIAN
Diagnostics Inc.

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VDP^{ro}® ELISA Diagnostic kits

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Swine Diagnostics 13

Poultry Diagnostics 16





Ruminant Diagnostics

EB-BVD-01	VDPro® BVDV AB ELISA	480 Tests
EB-TBE-01	VDPro® Bovine Tuberculosis AB ELISA	480 Tests
EB-BRU-01	VDPro® Brucella AB ELISA	480 Tests
EA-FMD-01	VDPro® FMDV NSP AB ELISA	480 Tests
EA-FMD-02	VDPro® FMDV Type O ELISA	480 Tests

Swine Diagnostics

ES-CSF-01	VDPro® CSFV AB ELISA	480 Tests
ES-CSF-02	VDPro® CSFV AB C-ELISA	480 Tests
ES-CSF-03	VDPro® CSFV AG ELISA	192 Tests
ES-CSF-04	VDPro® CSFV Marker AB ELISA	480 Tests
ES-ADV-01	VDPro® ADV AB Screen ELISA	480 Tests
ES-ADV-02	VDPro® ADV gI AB ELISA	480 Tests
ES-PRR-01	VDPro® PRRSV VR AB ELISA	480 Tests
ES-PRR-02	VDPro® PRRSV LV AB ELISA *Coming soon	480 Tests
ES-PRR-03	VDPro® PRRSV AB ELISA *Coming soon	480 Tests
ES-PCV-01	VDPro® PCV2 AB ELISA	480 Tests
EA-FMD-01	VDPro® FMDV NSP AB ELISA	480 Tests
EA-FMD-02	VDPro® FMDV Type O ELISA	480 Tests

Poultry Diagnostics

EP-NDV-01	VDPro® NDV AB ELISA	480 Tests
EP-IBD-01	VDPro® IBDV AB ELISA	480 Tests
EP-IBV-01	VDPro® IBV AB ELISA	480 Tests
EP-AIV-01	VDPro® AIV AB ELISA	480 Tests
EP-MGA-01	VDPro® MG AB ELISA	480 Tests
EP-MSY-01	VDPro® MS AB ELISA	480 Tests
EP-MGS-01	VDPro® MG/MS AB ELISA	480 Tests

VDPro® is a registered trademark of MEDIAN Diagnostics Inc.

Ruminant Diagnostics

Bovine viral diarrhea virus (BVDV)



Bovine Viral Diarrhea is a second class legally notifiable communicable disease and a list B disease as determined by the Office of International Epizootics (OIE). It is known to cause serious damage to cattle. Bovine Viral Diarrhea is caused by the BVD Virus which also infects swine leading to a reduction in productivity. It is a virus from the Pestivirus Genus similar to the Swine Fever Virus and requires a viral disease test. BVD Virus diagnosis should be frequently tested with antibody and antigen tests. Neutralizing antibody surveillance is crucial especially after vaccination.

VDPro® BVDV AB ELISA

- A blocking ELISA using the gene recombinant E2 protein and monoclonal antibody that is used for the quantitative measurement of neutralizing antibodies specific to BVDV.
- It has a high correlation with virus neutralizing antibody titers and can test antibody levels. It is highly reproducible in vaccination groups.
- Although suitable for the antibody testing of the vaccination group, it is not suitable for infection tests and examination of latent infected objects.
- Can be used as a bovine serum as well as a swine serum.
It is possible to detect antibodies without cross-reactivity with CSFV in BVD infection suspected swine.

Features

- Color coded buffer system
- Ready-to-use reagent, simple test
- Used for a wide range of animal species (cattle, swine)
- High reproducibility and accuracy
- Stability for more than 12 months in cold storage

Advantages

- Safety by using recombinant protein
- Cost savings by using strip plate

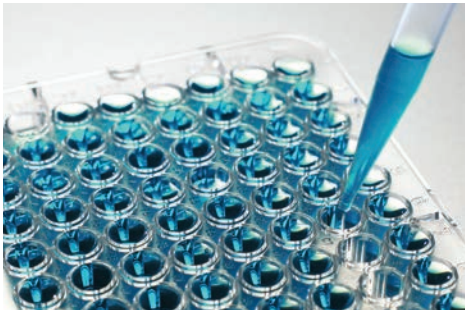
Order Information

Cat. No.	Product Name	Quantity
EB-BVD-01	VDPro® BVDV AB ELISA	480 Tests

* Approved by QIA(Animal and Plant Quarantine Agency), Korea.

Ruminant Diagnostics

Bovine tuberculosis (BT)



Bovine tuberculosis is chronic debilitating zoonosis relevant to the disease classification list B of the Office of International Epizootics (OIE) and is officially classified and controlled as the second class cattle plague in Korea. Tuberculosis is mainly caused by *Mycobacterium bovis* that is mostly infected from cattle to cattle, but can be also found in human beings, swine, goats, sheep, cats and other mammals.

It is difficult to find symptoms in the initial stage of infection, but in the later stage, nodules and lumps are attached to lungs, abdominal organs, lymphatic gland and the wall of the chest cavity, and lesions are found even in breast and bone.

VDPro® Bovine Tuberculosis AB ELISA

- It is an indirect ELISA using recombinant protein that is used to check antibodies produced by the bovine tuberculosis infection.
- It has a high correlation with the results of tuberculosis skin test (PPD) and shows a relatively high level of sensitivity and specificity compared other brands.

Features

- Color coded buffer system
- Ready-to-use reagent, easy test
- High reproducibility and accuracy
- Stability for at least 12 months in the cold storage

Advantages

- Safety by using recombinant protein
- Cost savings by using strip plate



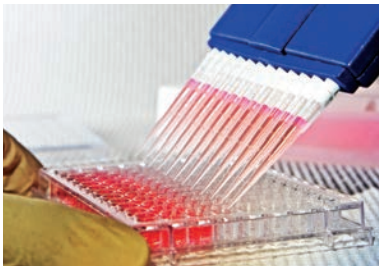
Order Information

Cat. No.	Product Name	Quantity
EB-TBE-01	VDPro® Bovine Tuberculosis AB ELISA	480 Tests

* Approved by QIA(Animal and Plant Quarantine Agency), Korea.

Ruminant Diagnostics

Brucella



Bovine Brucellosis Infection causes abortion due to Placentitis, Endometritis, etc. It also causes infertility in bulls due to Orchitis, sperm deformity, etc. without any special external symptoms. The infected cattle carry Brucella for long periods of time without any special symptoms and continuously release Brucella infecting non-infected animals.

Bovine Brucellosis is caused by Brucella Abortus. Currently, there is no safe vaccine or effective treatment for Bovine Brucellosis Infection so it is important to diagnose quickly and accurately through antibody tests.

VDPro® Brucella AB ELISA

- Indirect ELISA using Brucella antigen which is used for quantitative measurement of an antibody specific to Brucella in bovine serum.
- High correlation with Rose Bengal test results and represents a relatively high degree of sensitivity and specificity compared to other brands.

Features

- Color coded buffer system
- Ready-to-use reagent, easy test
- High reproducibility and accuracy
- Stability for more than 12 months in cold storage

Advantages

- Cost savings by using strip plate



Order Information

Cat. No.	Product Name	Quantity
EB-BRU-01	VDPro® Brucella AB ELISA	480 Tests

* Approved by QIA(Animal and Plant Quarantine Agency), Korea.

FMDV Diagnostics

Foot-and-Mouth Disease (FMDV)

Foot-and-Mouth Disease is a first class legally notifiable communicable disease and a list A disease determined by the Office of International Epizootics (OIE) It is an international epidemic disease that infects cloven-hoofed animals such as cattle and swine. It is a very contagious disease that requires an intensive surveillance program. In addition, there are seven species of serotype O, A, C, Asia1, SAT1, SAT2 and SAT3 so a great variety of diagnostics are necessary.

An antibody test using non-structural proteins can test vaccine antibody and differentiation regardless of serotypes and can be used for surveillance tests on both non-occurrence area and vaccination area.

An antibody test using structural protein is suitable to test neutralizing antibodies by serum type and can be used in FMDV free area.

VDPro® FMDV NSP ELISA

- Blocking ELISA using recombinant 3ABC protein and monoclonal antibody.
It is used to qualitatively detect an antibody specific to the non-structural protein of FMDV.
- Antibody tests are available regardless of serotypes of FMDV.
- Represents the high specificity of 99.7%.
- Excellent quality; Commercialized with our advanced technology for the third time in the world.

VDPro® FMDV Type O ELISA

- Blocking ELISA using recombinant protein and monoclonal antibody.
It is used to qualitatively detect an antibody specific to the structural protein of FMDV.
- Represents the high specificity of 99.2%.
- It is the world's first ELISA using gene recombinant P1 protein with domestic technology.

Product features

- Color coded buffer system
- Ready-to-use reagent, easy test
- Safety by using recombinant antigen
- High reproducibility and accuracy in a short reaction time (90 minutes)
- Used for a great range of animal species (cattle, swine, sheep, goats)
- Stability for more than 12 months in cold storage

Advantages

- Cost savings by using strip plate

Order Information

Cat. No.	Product Name	Quantity
EA-FMD-01	VDPro® FMDV NSP AB ELISA	480 Tests
EA-FMD-02	VDPro® FMDV Type O ELISA	480 Tests
EA-FMD-03	VDPro® FMDV Type A AB ELISA	480 Tests
EA-FMD-04	VDPro® FMDV Type Asia1 AB ELISA	480 Tests

* Approved by QIA(Animal and Plant Quarantine Agency), Korea.

Swine Diagnostics

Classical swine fever virus (CSFV)

Swine fever is a first class legal notifiable communicable disease and a List A disease as determined by the Office of International Epizootics(OIE). It is highly infectious and also has a high fatality rate in swine. Swine fever is caused by swine fever virus (Classical Swine Fever Virus, CSFV) and can be prevented through vaccination. Antibody and antigen tests should be conducted together for swine fever diagnosis and periodical serological surveillance is especially crucial in the vaccination area.

VDPro® CSFV AB C-ELISA

- Blocking ELISA using recombinant E2 protein and monoclonal antibody. It is used to detect the presence of an anti-E2 antibody in swine serum.
- Offers a rapid, simple and specific method to detect antibodies against CSFV without cross reaction with the antibodies of other Pestiviruses such as Bovine Viral Diarrhea Virus (BVDV) and Border Disease Virus (BDV).
- Shows excellent correlation with Neutralizing Peroxidase-linked Assay (NPLA), an OIE prescribed method.

VDPro® CSFV AG ELISA

- Double Antibody Sandwich (DAS) ELISA which is based on a monoclonal antibody to the E2 protein. It is used to detect virus in blood, white blood cells and tissue samples.
- Lowest limit of detection (LOD) of 103 TCID50 / mL regardless of CSFV genotype so it is suitable for countries using the LOM vaccine.
- Helps to diagnose quickly with a reagent that can easily process the whole blood sample.

Product features

- Color coded buffer system
- Ready-to-use reagent, simple test
- Safety by using recombinant protein
- High reproducibility and accuracy
- Stability for at least 12 months in cold storage

Advantages

- Cost savings by using strip plate

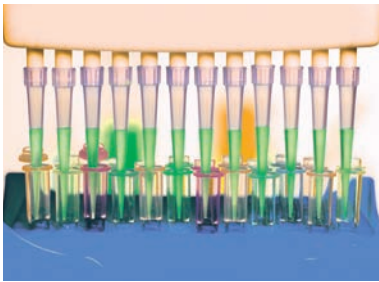
Order Information

Cat. No.	Product Name	Quantity
ES-CSF-02	VDPro® CSFV AB C-ELISA	480 Tests
ES-CSF-03	VDPro® CSFV AG ELISA	192 Tests
ES-CSF-04	VDPro® CSFV Marker AB ELISA	480 Tests

* Approved by QIA(Animal and Plant Quarantine Agency), Korea.

Swine Diagnostics

Aujeszky's disease virus (ADV)



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. It mainly infects swine and the recovered swine becomes a carrier. The vaccination uses a gI (gE) as a deletion vaccine so the differentiation of vaccine antibody and infection antibody is available through the gI (gE) antibody test. The antibody and antigen tests should be conducted together for the diagnosis of ADV and periodical serological surveillance is especially crucial in the vaccination area.

VDPro® ADV AB Screen ELISA

- Blocking ELISA using ADV mass production main virus and a monoclonal antibody. It is used for qualitative measurements of neutralizing antibodies against ADV.
- It shows a high concordance rate with virus neutralizing antibody titers and can examine the antibodies by vaccination or infection.
- The differentiation of vaccine antibody and infection antibody can be conducted in conjunction with gI (gE) antibody test.

VDPro® ADV gI AB ELISA

- It is designed to detect the presence of an anti-ADV gI (gE) antibody in swine serum.
- It provides a rapid, simple and specific method for differentiating the antibodies against ADV infection and gI (gE) deleted vaccination.
- It shows excellent correlation with Virus Neutralization (VN) tests. It is a prescribed method by OIE and has enough level of sensitivity to international standard serums.

Product features

- Color coded buffer system
- Ready-to-use reagent, easy test
- Safety by using recombinant protein
- High reproducibility and accuracy
- Stability for at least 12 months in cold storage

Advantages

- Cost savings by using strip plate

Order Information

Cat. No.	Product Name	Quantity
ES-ADV-01	VDPro® ADV AB Screen ELISA	480 Tests
ES-ADV-02	VDPro® ADV gI AB ELISA	480 Tests

* Approved by QIA(Animal and Plant Quarantine Agency), Korea.



Swine Diagnostics

Swine Respiratory Diseases



Swine Respiratory Disease is a chronic disease caused by many types of viruses and bacteria. It can cause a major loss in the productivity of swine. In addition, it is also known to be a complex pathogen related to PRRSV and PCV2 causing diseases such as PRDC, PCVAD, etc.

When testing for Swine Respiratory Disease, the comprehensive test of the antibody to swine herd and pathogen test control is more critical than an individual test, and the periodical disease control and data accumulation management is crucial.

In order to maintain and manage swine health in a stock farm, vaccinations for six or more of chronic respiratory diseases are needed in addition to periodic serologic tests. Statistical control of the test results is necessary.

VDPro® Swine Respiratory ELISA system has great performance results in the comprehensive swine serum profile controls and offers excellent reliability as well as data compatibility with world-famous testing products.

VDPro® Swine Respiratory System

- The first comprehensive swine respiratory antibody test system in Korea.
- Quantitative test by single dilution (1/100) is possible.
- High concordance rate with global standard assay (IFA, ELISA).
- Suitable for automated test equipment by use of all reagents compatibly. (Except PRRSV AB ELISA)



Product Features

- Color coded buffer system
- Ready-to-use reagent, easy test
- Rapid test with short reaction time
- High reproducibility and accuracy
- Stability for at least 12 months in the cold storage

Advantages

- Cost savings by using strip plate

Order Information

Cat. No.	Product Name	Quantity
ES-PRR-01	VDPro® PRRSV VR AB ELISA	480 Tests
ES-PRR-02	VDPro® PRRSV LV AB ELISA *Coming soon	480 Tests
ES-PRR-03	VDPro® PRRSV AB ELISA	480 Tests
ES-PCV-01	VDPro® PCV2 AB ELISA	480 Tests

* Approved by QIA(Animal and Plant Quarantine Agency), Korea.

Poultry Diagnostics

Poultry diseases

There are several viral and bacterial diseases affecting birds and most of them belong to the legal infectious notifiable communicable diseases as well as diseases on the OIE list. These diseases give serious damage to the productivity of the poultry industry. When testing poultry diseases, poultry serum tests and causer tests are necessary in addition to periodic surveillance and data accumulation management. For the health management and production quality of poultry in farms, vaccinations for six or more diseases as well as serum profile management through periodic serologic tests are needed. VPro® Poultry ELISA systems have excellent performance results in the comprehensive poultry serum profile management. It also offers excellent reliability and data compatibility with world-famous testing products.

VPro® Poultry ELISA System

- Quantitative tests by single dilution (1/500) and six different disease antibody tests are possible with a single sample in one process.
- High concordance rate with global standard assay (HI, AGID).
- Poultry antibody profile analysis and fast tests are possible.
- Suitable for automated testing equipment and compatible for use by all reagents.

Product Features

- Color coded buffer system
- Ready-to-use reagent, easy test
- Rapid test with short reaction time
- High reproducibility and accuracy
- Stability for at least 12 months in cold storage

Advantages

- Cost savings by using strip plate

Order Information

Cat. No.	Product Name	Quantity
EP-NDV-01	VPro® NDV AB ELISA	480 Tests
EP-IBD-01	VPro® IBDV AB ELISA	480 Tests
EP-IBV-01	VPro® IBV AB ELISA	480 Tests
EP-AIV-01	VPro® AIV AB ELISA	480 Tests
EP-MGA-01	VPro® MG AB ELISA	480 Tests
EP-MSY-01	VPro® MS AB ELISA	480 Tests
EP-MGS-01	VPro® MG/MS AB ELISA	480 Tests

* Approved by QIA(Animal and Plant Quarantine Agency), Korea.

VDP[®] Standard Diagnostic Reagents

FA Reagent	19
HI Reagent	20
AGID Reagent	21
MAT Reagent	22





FA Reagent		
RS-CSF-11	VDPro® CSFV FA Reagent	50 Tests
RS-ADV-11	VDPro® ADV FA Reagent	50 Tests
RS-PRR-11	VDPro® PRRSV FA Reagent	50 Tests
RS-PCV-11	VDPro® PCV2 FA Reagent	50 Tests
RS-SIV-11	VDPro® SIV FA Reagent	50 Tests
RC-RAB-11	VDPro® Rabies FA Reagent	50 Tests
RS-TGE-11	VDPro® TGEV FA Reagent	50 Tests
RS-PED-11	VDPro® PEDV FA Reagent	50 Tests
RS-ROT-11	VDPro® Rota FA Reagent	50 Tests

IFA Reagent		
RS-PRR-21	VDPro® PRRSV IFA Reagent	384 Tests

HI Reagent		
RS-PPV-31	VDPro® PPV HI Reagent	100 Tests
RS-EMC-31	VDPro® EMCV HI Reagent	100 Tests
RC-JEV-31	VDPro® JEV HI Reagent	100 Tests

AGID Reagent		
RB-BLV-41	VDPro® BLV AGID Reagent	100 Tests
RP-IBD-41	VDPro® IBDV AGID Reagent	200 Tests

MAT Reagent		
RS-ARH-51	VDPro® AR MAT Reagent	200 Tests
RS-SAL-51	VDPro® ST MAT Reagent	200 Tests

VDPro® is a registered trademark of MEDIAN Diagnostics Inc.

FA Reagent

The Fluorescent Antibody Test is a standard method of diagnosis for animal diseases and can simply test tissue of pathogens. Major pathogens such as swine fever virus can be simply tested in tissue samples by using an inexpensive fluorescent antibody reagent and this method can be used as a standard diagnostic method for disease appraisal institutions. The VPro® FA Reagent provides a variety of standard fluorescent antibody test reagents for local swine viral diseases including swine fever virus.

VPro® FA Reagent

- Can be used in a simple laboratory test at reasonable cost.
- Easy and convenient specific fluorescence observation with FITC Conjugate including contrast dye.
- A cleaning solution and mounting solution are provided so any other separate reagent is not necessary.
- Can be used directly without dilution by a dropper bottle.



Product Configuration

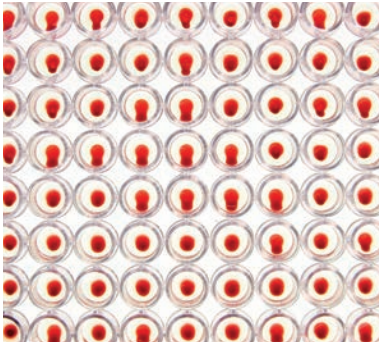
VPro® FA Reagent	
1X MAb	8mℓ
1X FITC Anti-mouse Conjugate	8mℓ
10X Washing Buffer	100mℓ
FA Mounting solution	3mℓ

VPro® PRRSV IFA Reagent	
PRRSV Antigen Plate	4ea
50X FITC Anti-Swine Conjugate	1mℓ
Positive Control (PC)	0.3mℓ
Negative Control (NC)	0.3mℓ
10 X Washing Buffer	120mℓ

Product information

Cat. No.	Product Name	Quantity
RS-CSF-11	VPro® CSFV FA Reagent	50 Tests
RS-ADV-11	VPro® ADV FA Reagent	50 Tests
RS-PRR-11	VPro® PRRSV FA Reagent	50 Tests
RS-PCV-11	VPro® PCV2 FA Reagent	50 Tests
RS-SIV-11	VPro® SIV FA Reagent	50 Tests
RC-RAB-11	VPro® Rabies FA Reagent	50 Tests
RS-TGE-11	VPro® TGEV FA Reagent	50 Tests
RS-PED-11	VPro® PEDV FA Reagent	50 Tests
RS-ROT-11	VPro® Rota FA Reagent	50 Tests
RS-CSF-11	VPro® CSFV FA Reagent	50 Tests

HI Reagent



The Hemagglutination Inhibition Reaction Test is a typical standard antibody test for animal disease. It has been used to quantitatively measure antibodies to the pathogen. The test is somewhat inconvenient to use because it needs various types of buffer solutions and blood cells. However, it has been used worldwide as a global standard test until now.

The antibody test for the major pathogens including swine parvovirus can precisely test standard antibody titers in serum samples with inexpensive HI diagnostic reagent so it can be used as a standard test for disease appraisal institutions.

VDPro® HI Reagent offers a variety of standard HI test reagents for the antibody test of viral diseases in local swine.

VDPro® HI Reagent

- Offers all buffer solutions, contrast reagents and antigens produced by the government's test and standard test criteria.
- Meets the global standard test criteria.
- It can be used in a simple laboratory test at a reasonable cost.

Product Configuration

VDPro® HI Reagent	
HI Antigen	1ml
RBC Washing Buffer	120ml
RBC Dilution Buffer	120ml
Dilution Buffer	120ml
Sample Treatment Buffer	120ml
Positive control (PC)	1ml
Negative control (NC)	1ml



Order Information

Cat. No.	Product Name	Quantity
RS-PPV-31	VDPro® PPV HI Reagent	100 Tests
RS-EMC-31	VDPro® EMCV HI Reagent	100 Tests
RC-JEV-31	VDPro® JEV HI Reagent	100 Tests

* These products have been developed by a joint research in collaboration with QIA(Animal and Plant Quarantine Agency), Korea.

AGID Reagent



Agar gel immunodiffusion test (AGID) is a long-time used standard antibody test and can do the qualitative test for antibodies to pathogens. This test can be used as a confirming test of antibody because its specificity is very high although its detection sensitivity is low.

VPro® AGID Reagent provides diagnostic reagents capable to do a qualitative test of antibodies against bovine leukemia virus (BLV) and infectious bursal disease virus (IBDV).

This reagent can be used as a standard test of disease appraisal institutions. BLV AGID Reagent uses a FLK cell standard antigen and IBDV AGID Reagent is a standard AGID test reagent manufactured by using the recombinant VP2 protein as an antigen.

VPro® AGID Reagent

- Offers all buffer solutions, contrast reagents and antigens produced by the government's standard test criteria.
- Meets the global standard test criteria.
- It can be used in a simple laboratory test at a reasonable cost.

Product Configuration

VPro® BLV AGID Reagent	
AGID antigen (Lyophilized)	1mℓ
Agar Gel	100mℓ
Positive control (PC)	4mℓ

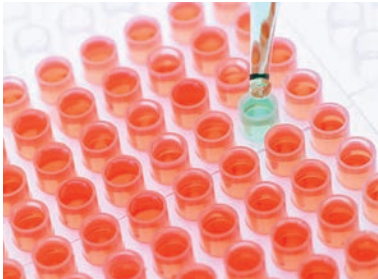
VPro® IBDV AGID Reagent	
AGID antigen (Lyophilized)	2mℓ
Agar Gel	100mℓ x 2
Positive control (PC)	2mℓ

Order Information

Cat. No.	Product Name	Quantity
RB-BLV-41	VPro® BLV AGID Reagent	100 Tests
RP-IBD-41	VPro® IBDV AGID Reagent	200 Tests

* Developed by a joint research in collaboration with QIA (Animal and Plant Quarantine Agency), Korea.

MAT Reagent

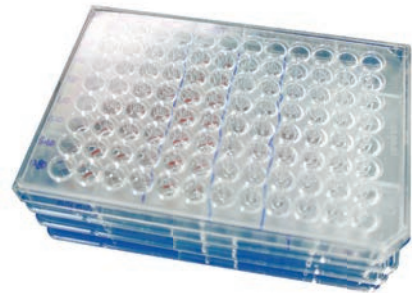


Micoplate Agglutination Test (MAT) is a typical method of quantitatively testing for bacterial pathogens and can be used for the quantitative assay of the antibody titer against pathogens.

Unlike LPS ELISA, it is used for quantitative measurement of antibodies against pathogens from an Atrophic Rhinitis (AR) and Salmonella infection. It can also measure the antibody titer of the serum sample diluted serially. It is better to measure antibody titers rather than performing individual tests. VDPro® MAT Reagent uses inactive Typhimurium Antigens cultivated with *B. bronchiseptica*, *S.* and offers standard MAT examination reagents.

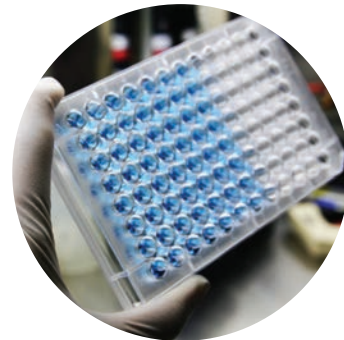
VDPro® MAT Reagent

- Provides all buffer solutions and contrast reagents required for antigens produced by using a standard strain.
- It can be used in a simple laboratory test at an economical cost.
- It can be only be used for the serum titer test.



Product Configuration

VDPro® MAT Reagent	
MAT Antigen	120mL x 2
Dilution Buffer	120mL x 2
Positive control (PC)	0.5mL
Negative control (NC)	0.5mL



Order Information

Cat. No.	Product Name	Quantity
RS-ARH-51	VDPro® AR MAT Reagent	200 Tests
RS-SAL-51	VDPro® ST MAT Reagent	200 Tests

* Developed by a joint research in collaboration with QIA (Animal and Plant Quarantine Agency), Korea.

Nucleic Acid Diagnostics

VDx[®] NAD Gene Diagnostic kits

VDx[®] PCR & RT-PCR Kits	25
VDx[®] PRRSV Gene Diagnosis	26
VDx[®] Abortion Gene Diagnosis	27
VDx[®] DNA Chip kits	28
VDx[®] CSFV GT DNA Chip	29
VDx[®] PMWS GT DNA Chip	30



VDx[®] PCR & RT-PCR kits

NS-CSF-11	VDx [®] CSFV 5'NCR RT-PCR	50 Tests
NS-PCV-11	VDx [®] PCV2 ORF2 PCR	50 Tests
NS-PRR-11	VDx [®] PRRSV ORF7 RT-PCR	50 Tests
NS-PRR-12	VDx [®] PRRSV NA/EU typing nested PCR	50 Tests
NS-PRR-13	VDx [®] PRRSV HP MP RT-PCR	50 Tests
NS-ABO-11	VDx [®] Abortion MP PCR (PPV/ADV)	50 Tests
NS-ABO-12	VDx [®] Abortion MP RT-PCR II (EMCV/JEV)	50 Tests
NS-SIV-11	VDx [®] SIV RT-PCR	50 Tests
NS-SIV-12	VDx [®] SIV Newflu(M) MP RT-PCR	50 Tests
NS-PED-11	VDx [®] PEDV S RT-PCR	50 Tests
NS-ROT-11	VDx [®] Rotavirus VP6 RT-PCR	50 Tests
NS-PVD-11	VDx [®] 돼지바이러스성 설사(3종) MP RT-PCR (PED/TGE/RotaA)	50 Tests
NP-FTI-11	VDx [®] 가금티푸스균 감별 동정용 PCR	50 Tests
NB-MTD-11	VDx [®] 소 모기매개바이러스성 질병 스크린 RT-PCR I (akabane/aino)	50 Tests
NB-MTD-12	VDx [®] 소 모기매개바이러스성 질병 스크린 RT-PCR II (Chuzan/BEF/Ibaraki)	50 Tests
NB-BLV-11	VDx [®] BLV PCR	50 Tests
NB-BLV-12	VDx [®] BLV nested PCR	50 Tests
New	Customized Amplification Service	Contact us.

VDx[®] DNA Chip kits

NC-CBC-21	VDx [®] CSFV/BVDV GT DNA Chip(CSFV/BVDV)	24 Tests
NC-CBC-11	VDx [®] CSFV/BVDV MP RT-PCR (for DNA Chip)	50 Tests
NS-PMC-21	VDx [®] PMWS GT DNA Chip(PRRSV/PCV2/PPV)	24 Tests
NS-PMC-11	VDx [®] PRRSV ORF6 MP RT-PCR(for DNA Chip)	50 Tests
NS-PMC-12	VDx [®] PCV2/PPV MP PCR (for DNA Chip)	50 Tests

VDPro[®] is a registered trademark of MEDIAN Diagnostics Inc.

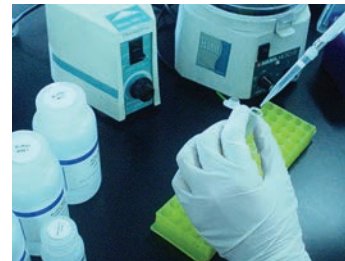
VDx[®] PCR & RT-PCR Kits

The rapid identification and monitoring of pathogens is very important because infectious pathogens such as viruses and bacteria cause a great loss to livestock and livestock related industries.

VDx[®] gene amplification reagent is used to test the genes of infectious pathogen epidemics in cattle 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 cross-contamination in the laboratory and is a rapid test method. 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.

Product Features

- 1-step premix reagent
- Multiplex amplification



Product Configuration

VDPro [®] PCR Reagent	
PCR Premix (20 μ l)	50 Tubes
Primer mix	400 μ lX2
Control DNA	100 μ l

VDPro [®] RT-PCR Reagent	
RT-PCR Premix (20 μ l)	50 Tubes
Primer mix	400 μ lX2
Control DNA	100 μ l

Product Information

Cat. No.	Product Name	Quantity
NS-CSF-11	VDx [®] CSFV 5'NCR RT-PCR	50 Tests
NS-PCV-11	VDx [®] PCV2 ORF2 PCR	50 Tests
NS-PRR-11	VDx [®] PRRSV ORF7 RT-PCR	50 Tests
NS-PRR-12	VDx [®] PRRSV NA/EU typing nested PCR	50 Tests
NS-PRR-13	VDx [®] PRRSV HP MP RT-PCR	50 Tests
NS-ABO-11	VDx [®] Abortion MP PCR (PPV/ADV)	50 Tests
NS-ABO-12	VDx [®] Abortion MP RT-PCR II (EMCV/JEV)	50 Tests
NS-SIV-11	VDx [®] SIV RT-PCR	50 Tests
NS-SIV-12	VDx [®] SIV Newflu(M) MP RT-PCR	50 Tests
NS-PED-11	VDx [®] PEDV S RT-PCR	50 Tests
NS-ROT-11	VDx [®] Rotavirus VP6 RT-PCR	50 Tests
NS-PVD-11	VDx [®] Porcine Viral Diarrhea MP RT-PCR (PED/TGE/Rota)	50 Tests
NP-FTI-11	VDx [®] Fowl Typhoid Identification PCR	50 Tests
NB-MTD-11	VDx [®] Bovine MTVD MP RT-PCR I (Akabane/Aino) *MTVD(Mosquito-Transmitted Viral Diseases)	50 Tests
NB-MTD-12	VDx [®] Bovine MTVD MP RT-PCR II (Chuzan/BEF/Ibaraki)	50 Tests
NB-BLV-11	VDx [®] BLV PCR	50 Tests
NB-BLV-12	VDx [®] BLV nested PCR	50 Tests
New	Customized Amplification Service	Upon request.

VDx[®] PRRSV Gene Diagnosis



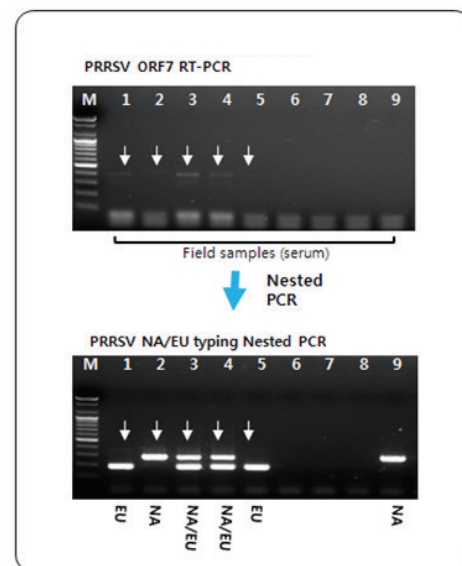
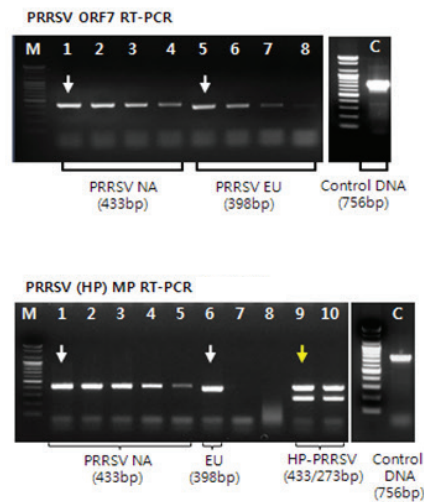
PRRS(Porcine Reproductive and Respiratory Syndrome) is a disease caused by the infection of the porcine reproductive and respiratory syndrome virus (PRRSV) It causes serious damage such as reproductive disorders, mortality of piglets and respiratory symptoms in growing and fed pigs.

PRRSV is a virus that grows well in the alveolar macrophage. It is stable in pH5 to 7 and is strong at low temperatures, but dies at 20°C in 24 hours. It is known that infection occurs mainly through contact with other infected swine, contaminated shoes and clothing, and animal breeding equipment such as needles used in artificial insemination.

VDx[®] PRRSV RT-PCR is a genetic test reagent which tests the presence or absence of PRRSV in samples suspected to be infected. It tests with high sensitivity and proceeds to RT-PCR in one step. It can be immediately used to test the extracted RNA without preparation of a separate reagent. Premix is for 1 test in a dry environment. Different sizes of Control DNA are offered to be used for validation so that the reliability of the test can be assured.

If the amount of virus is small due to the characteristics of sample tests, the result can be super sensitively confirmed by using a nested PCR, and the test can be conducted by separating the two (NA / EU) genotypes of PRRSV on purpose. In addition, a test can be conducted by separating the Chinese type of high pathogen PRRSV.

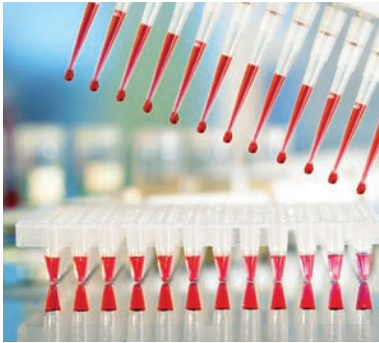
PRRSV



Product Information

Cat. No.	Product Name	Quantity
NS-PRR-11	VDx [®] PRRSV ORF7 RT-PCR	50 Tests
NS-PRR-12	VDx [®] PRRSV NA/EU typing nested PCR	50 Tests
NS-PRR-13	VDx [®] PRRSV HP MP RT-PCR	50 Tests

VDx[®] Abortion Gene Diagnosis

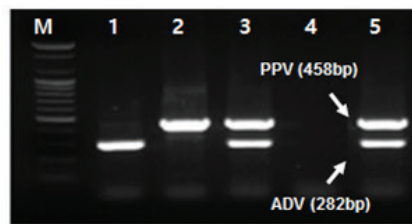


Swine viral abortion is caused by several viral causer species and occurs by a single or multiple infections. In the abortion causer test, the antigen test is very difficult because antigen and antibody coexist. As such, a DNA test is the most accurate and appropriate test method.

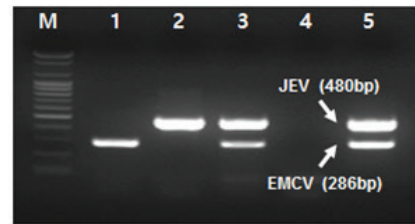
VDx[®] Abortion genetic diagnostic reagent is a reagent that can test abortion causer with Multiplex and precisely examine the genes of PPV, ADV, PRRSV, EMCV and JEV. In addition, if you add genes extracted by providing Multiplex 1-step PCR and RT-PCR reagents, you can immediately use it to test rapidly and can also test more-than-2 kinds of genes economically at the same time. The reliability of test can be obtained by providing different sizes of control DNA to be used for validation.

Abortion

Abortion MP PCR(PPV/ADV)



Abortion MP RT-PCR2 (JEV/EMCV)



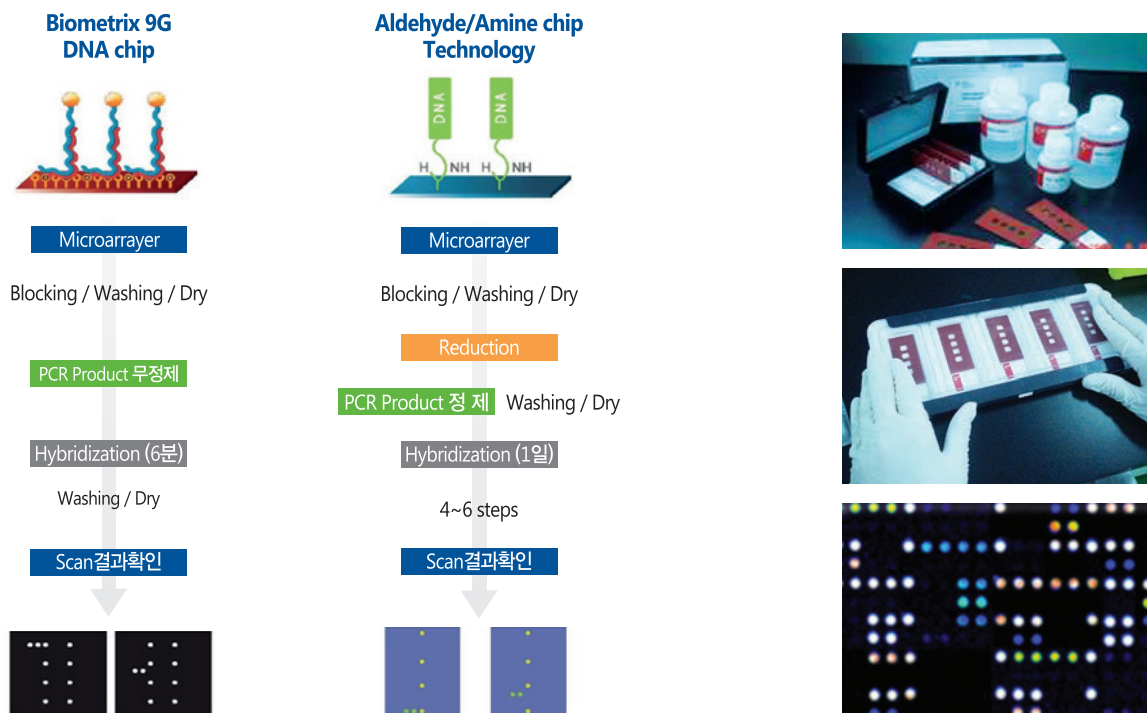
Product Configuration

Cat. No.	Product Name	Quantity
NS-ABO-11	VDx [®] Abortion MP PCR (PPV/ADV)	50 Tests
NS-ABO-12	VDx [®] Abortion MP RT-PCR II (EMCV/JEV)	50 Tests
NS-ABO-13	VDx [®] Abortion MP RT-PCR I (PRRSV/EMCV/JEV)	50 Tests

VDx[®] DNA Chip kits

VDx[®] DNA Chip is the world's first animal diagnostic biochip with immobilized nano-level gene probes using gene probe immobilization technology based on Biometrix's innovative 9G Chip. It utilizes molecular recognition technology and Microarray. It makes SNP (Single Nucleotide Polymorphism) levels of differential diagnosis possible and provides excellent test resolution and reproducibility even for short reaction times with a uniform space array technology probe.

9G DNA Chip Technology



Product Features

Features	9G DNA Chip	Aldehyde Chip
Immobilization technology	Guanidine molecular recognition	Imine chemical bond
Test time	Within 5 hours	24 hours
Test step	3 steps	More than 9 steps
Reproducibility	Excellent SNP reproducibility	Imperfect reproducibility
Background fluorescence	Low background/high reaction	High background / low reaction

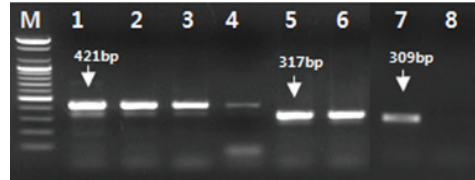
Product Configuration

VDPro [®] DNA Chip	
DNA Chip	24 Tests
Hybridization Buffer	10ml
Washing Buffer 1	100ml x 2
Washing Buffer 2	100ml

VDx[®] CSFV GT DNA Chip

CSFV genetic test is often conducted after amplifying 5' NCR, E2 and NS5B genes. The 5' NCR gene shows high sensitivity levels of detection so it is the most commonly used.

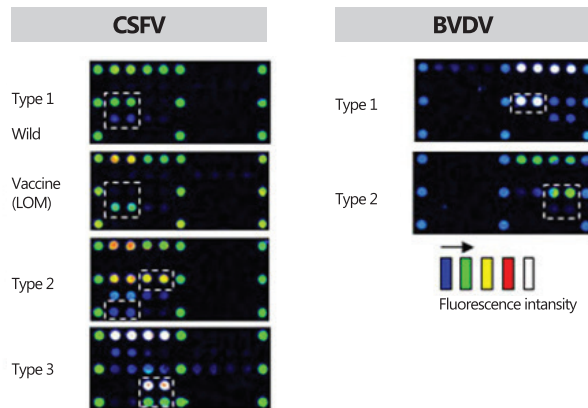
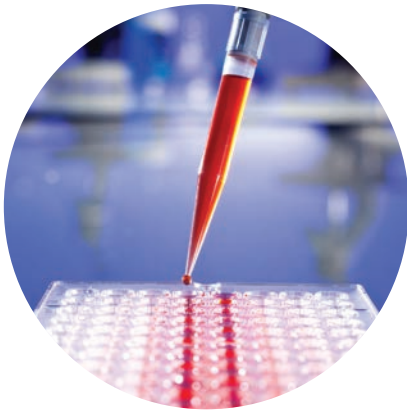
VDx[®] CSFV gene amplification reagent offers a fluorescent (Cy3) labeled the multiplex RT-PCR reagent. It is an easy method to use immediately by adding the genes extracted with 1-step premix simply so that a quick test is possible. In addition, it is economical that 2 kinds of pathogens, CSFV and BVDV 2, can be tested simultaneously because it consists of Multiplex PCR.



1~4: CSFV, 5,6: BVDV1
7: BVDV2, 8: Negative

The amplified gene can be checked through electrophoresis. Analysis of an improved genotype is possible at the same time as the positive / negative determination in CSFV / BVDV GT DNA Chip. It is a test reagent suitable for diagnostic laboratory (D-LAB). In addition, you can offer a different size of Control DNA to be used in the Validation to assure the reliability of test.

VDx[®] CSFV / BVDV GT DNA Chip can perform the differentiation diagnosis of 3 genotypes of CSFV, vaccination strain (LOM) / field strain and the genotype test of 2 species of BVDV at the same time. The 9G immobilization technology using molecular recognition techniques and offers enhanced reproducibility of tests.



Product Configuration

Cat. No.	Product Name	Quantity
NC-CBC-11	VDx [®] CSFV/BVDV MP RT-PCR	50 Tests
NC-CBC-21	VDx [®] CSFV/BVDV GT DNA Chip	24 Tests

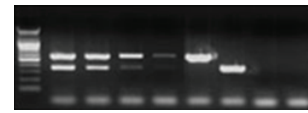
VDx[®] PMWS GT DNA Chip

PCVD is associated to PCV2 diseases. It is used for testing the cause of complex diseases such as PMWS and PRDC.

VDx[®] PMWS GT DNA Chip reagent is a reagent that can test pathogenic genes related to PCVD with Single and Multiplex. It is also possible to test for PRRSV, PCV2 and PPV.

VDx[®] gene amplification reagent offers the fluorescent (Cy3) labeled multiplex PCR and RT-PCR reagents. Gene amplification reagents can be used for the test after simply adding the gene extracted with the 1-step premix so that a quick test is possible. It is also economical to test for more than two kinds of pathogen genes with Multiplex PCR at the same time.

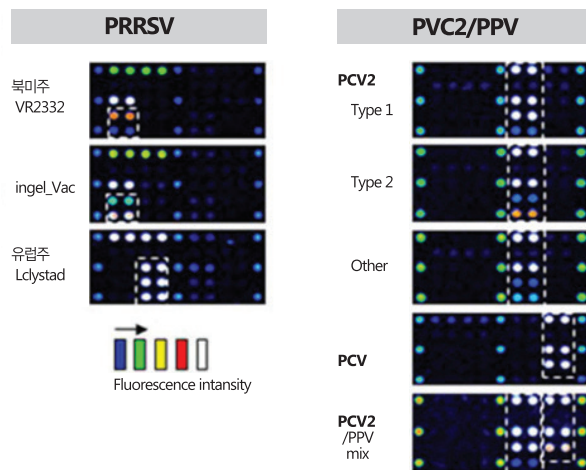
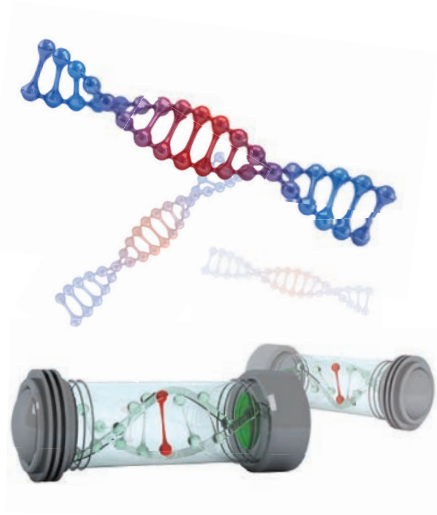
The amplified gene can be checked through electrophoresis. Analysis of an improved genotype is possible at the same time as the positive / negative determination in CSFV / BVDV GT DNA Chip. It is a test reagent suitable for diagnostic laboratory (D-LAB). In addition, you can offer a different size of Control DNA to be used in the Validation to assure the reliability of test.



1~4: PRRSV US/EU
5: PRRSV US/ 6: PRRSV EU/ 7,8: Negative(-)



1~4: PCV2/PPV
5: PCV2/ 6: PPV/ 7,8: Negative(-)



Product Configuration

Cat. No.	Product Name	Quantity
NS-PMC-11	VDx [®] PRRSV ORF6 MP RT-PCR	50 Tests
NS-PMC-12	VDx [®] PCV2/PPV MP PCR	50 Tests
NS-PMC-21	VDx [®] PMWS GT DNA Chip(PRRSV/PCV2/PPV)	24 Tests

MDAb[®] Antibodies for Veterinary Diagnostics

MEDIAN Diagnostics Inc. has developed and supplies about 60 kinds of raw materials of and monoclonal and polyclonal antibodies required for the animal disease diagnosis test and manufacturing reagents.

Product Information

Code	Product Name	Clone #	Immunogen	Isotype	Unit
9012	Anti-CSFV	339.1	rErns	IgG2a	1mg
9013	Anti-CSFV	LOM3	CSFV LOM	IgG1	1mg
9014	Anti-CSFV	LOM6	CSFV LOM	IgG1	1mg
9015	Anti-CSFV	LOM8	CSFV LOM	IgG1	1mg
9016	Anti-CSFV	LOM10	CSFV LOM	IgG1	1mg
9017	Anti-CSFV	LOM13	CSFV LOM	IgG1	1mg
9023	Anti-BVDV	12D6	BVDV	IgG1	1mg
9024	Anti-BVDV	2E10	BVDV	IgG1	1mg
9025	Anti-BVDV	5C12	BVDV	IgG1	1mg
9033	Anti-ADV	12G96	ADV	IgG2a	1mg
9034	Anti-ADV	12H47	ADV	IgG2a	1mg
9035	Anti-ADV	12G93	ADV	IgG2a	1mg
9036	Anti-ADV	87.30	ADV	IgG1	1mg
9041	Anti-PRRSV	4A5	rNC (VR2332)	IgG2a	1mg
9042	Anti-PRRSV	6F34	rNC (Lelystad)	IgG2a	1mg
9043	Anti-PRRSV	5C61	rNC (VR2332)	IgG2b	1mg
9044	Anti-PRRSV	5F74	rNC (VR2332)	IgG1	1mg
9051	Anti-PCV2	12C48	rNC	IgG2a	1mg
9052	Anti-PCV2	12A92	rNC	IgG2b	1mg
9053	Anti-PCV2	5B66	rNC	IgG2b	1mg
9054	Anti-PCV2	6E13	rNC	IgG2b	1mg
9055	Anti-PCV2	11B39	rNC	IgG1	1mg
9061	Anti-Rabies	2C6	Rabies ERA	IgG2a	1mg
9062	Anti-Rabies	4G31	rG	IgG2a	1mg
9063	Anti-Rabies	8D48	rG	IgG2a	1mg
9064	Anti-Rabies	9D7	rG	IgG2a	1mg
9081	Anti-JEV	30.16	JEV	IgG1	1mg
9082	Anti-JEV	77.22	JEV	IgG2a	1mg
9083	Anti-JEV	10H45	Vaccine	IgG1	1mg
9084	Anti-JEV	4B42	Vaccine	IgG2a	1mg



Code	Product Name	Clone #	Immunogen	Isotype	Unit
9085	Anti-JEV	6H32	Vaccine	IgG2a	1mg
9091	Anti-CPV	1B4	CPV	IgG2b	1mg
9092	Anti-CPV	9E11	Vaccine	IgG1	1mg
9093	Anti-CPV	3B19	Vaccine	IgG2a	1mg
9094	Anti-CPV	3B5	Vaccine	IgG2a	1mg
9095	Anti-CPV	9D8	Vaccine	IgG2a	1mg
9101	Anti-CPIV	7F17	CPIV	IgG2a	1mg
9102	Anti-CPIV	10B6	CPIV	IgG3	1mg
9103	Anti-CPIV	8D26	CPIV	IgG3	1mg
9111	Anti-ICHV	A10D14	ICHV	IgG2a	1mg
9141	Anti-MH	8B13	MH	IgG1	1mg
9151	Anti-Influenza A	3B19	AIV H9N2	IgG1	1mg
9152	Anti-Influenza A	10E21	AIV H9N2	IgG1	1mg
9153	Anti-influenza A	11F41	Newflu virus	IgG1	1mg
9154	Anti-influenza A	4B69	Newflu virus	IgG1	1mg
9155	Anti-influenza A	5E72	rNP	IgG1	1mg
9161	Anti-CCV	A72.3	CCV	IgG2a	1mg
9163	Anti-CCV	10B79	CCV	IgG2a	1mg
9164	Anti-CCV	12G17	CCV	IgG2a	1mg
9165	Anti-CDV	9A5	rHA	IgG2b	1mg
9172	Anti-FMDV	7F9	VP1 Peptide	IgG2a	1mg
9174	Anti-FMDV	7F16	r3AB	IgG1	1mg
9175	Anti-FMDV	9D11	r3AB	IgG1	1mg
9176	Anti-FMDV	17.9	FMDV Vaccine	IgG1	1mg
9181	Anti-TGEV	211.56	TGEV	IgG2a	1mg
9191	Anti-PEDV	3F12	PEDV	IgG2b	1mg
9201	Anti-RotaV	VP6	Rota virus	IgG2a	1mg
9901	Rabbit Anti-CSFV		CSFV rE2		2mg
9902	Rabbit Anti-BVDV		BVDV rE2		2mg
9903	Rabbit Ant-PRRSV		PRRSV rNC		2mg
9904	Rabbit Anti-PCV2		PCV2 rNC		2mg