

Porcine Viral Diarrhea Detection Solution

(Fluorescence PCR Method)

- Porcine Epidemic Diarrhea Virus (PEDV)
- Porcine Transmissible Gastroenteritis Virus (TGEV)
- Porcine Viral Diarrhea (PEDV/TGEV/PDCoV)
- ✓ Porcine Deltacoronavirus (PDCoV)
- Porcine Rotavirus (RV)
- ✓ Porcine Viral Diarrhea (PEDV/TGEV/RV)

Porcine viral diarrhea refers to gastrointestinal diseases in pigs caused by various viruses, leading to diarrhea, vomiting, dehydration, and weight loss, particularly in young piglets. The main disease-causing pathogens include Porcine Epidemic Diarrhea Virus (PEDV), Porcine Transmissible Gastroenteritis Virus (TGEV), Porcine Deltacoronavirus (PDCoV), and Porcine Rotavirus (RV). These viruses are highly contagious and primarily spread through the fecal-oral route, causing significant economic losses in swine production due to high mortality in neonatal piglets and growth delays in surviving pigs.

Symptoms of PEDV, TGEV, RV, and PDCoV can be similar and hard to differentiate. Tianlong provides a broad portfolio of reagents to help quick and accurate detection of gastrointestinal diseases in pigs. Fast detection can effectively control the virus infection, prevent large-scale outbreaks, and avoid significant economic losses.

VIRAL CLASSIFICATION

| | PEDV | TGEV | PDCoV | RV |
|--------|------------------|------|------------------|-----------|
| Family | Coronaviridae | | Reoviridae | |
| Genus | Alphacoronavirus | | Deltacoronavirus | Rotavirus |

SIGNS OR SYMPTOMS



MORTALITY RATE



Data source:

1. Vlasova, A. N., Wang, Q., Jung, K., Langel, S. N., Malik, Y. S., & Saif, L. J. (2020). Porcine coronaviruses. Emerging and transboundary animal viruses, 79–110.

FEATURES



Robust Portfolio

Provide a wide product portfolio to detect common porcine viral diarrhea viruses PEDV, TGEV, RV, PDCoV, the most common pathogens causing gastrointestinal diseases in pigs



Optimized Efficiency

Multiple Pathogens can be detected in one run to drive lab efficiency, suitable for differential diagnostics of PEDV, TGEV, RV, PDCoV



Various Specimen

Small intestinal empty intestine sample, intestinal content, stool, anal swab, environmental sample



Endogenous Internal Control

With endogenous internal control in the kit to monitor and prevent false negative results effectively



High Precision

The precision values of intra and inter Ct values were all <5%



Providing Integrated Solution

Provide complete solution including devices and reagents that detects PEDV, TGEV, RV, PDCoV with a high degree of sensitivity and specificity

- TGEV

PDCoV

DATA INTERPRETATION

Figure 1: Gradient concentration PEDV amplification curve

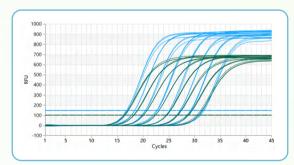


Figure 3:Gradient concentration amplification curve of PEDV/TGEV/PDCoV Nucleic Acid Multiplex Detection Kit

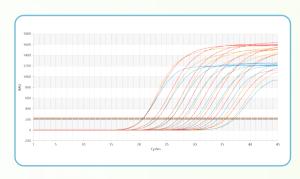


Figure 2: High concentration and low concentration PEDV repetitive amplification curve

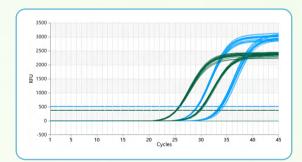
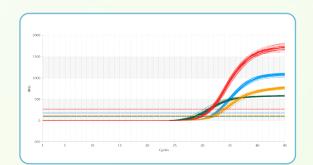


Figure 4: Precision test amplification curve of PEDV/TGEV/PDCoV Nucleic Acid Multiplex Detection Kit



ORDERING INFORMATION

| Cat.No | Product Name | Target Pathogen | Specification |
|--------|--|-----------------|---------------|
| P705H | Porcine Epidemic Diarrhea Virus (PEDV) Nucleic Acid Detection Kit | PEDV | 50T/Kit |
| Р706Н | Porcine Transmissible Gastroenteritis Virus (TGEV) Nucleic Acid Detection Kit | TGEV | 50T/Kit |
| P710H | Porcine Deltacoronavirus (PDCoV) Nucleic Acid Detection Kit | PDCoV | 50T/Kit |
| Р709Н | Porcine Rotavirus (RV) Nucleic Acid Detection Kit | RV | 50T/Kit |
| P717H | Porcine Viral Diarrhea PEDV/TGEV/RV Nucleic Acid Multiplex Detection Kit | PEDV/TGEV/RV | 50T/Kit |
| P720H | Porcine Viral Diarrhea PEDV/TGEV/PDCoV Nucleic Acid Multiplex Detection Kit | PEDV/TGEV/PDCoV | 50T/Kit |

SPECIFICATIONS

| Applicable Species | Swine | |
|----------------------|---|--|
| Target Pathogen | Porcine Epidemic Diarrhea Virus (PEDV), Porcine Transmissible Gastroenteritis Virus (TGEV), Porcine Rotavirus (RV), Porcine Deltacoronavirus (PDCoV) | |
| Technology | Fluorescence PCR Method | |
| Specimen | Small intestinal empty intestine sample, intestinal content, stool, anal swab, environmental sample | |
| Sensitivity | 600 copies/mL | |
| Precision | -25~-15℃ for 12 months | |
| Applicable Equipment | Highly compatible with mainstream PCR systems, such as Tianlong Gentier Real-time PCR System, Roche cobas z480, Applied Biosystems™ QuantStudio™ 5 Real-Time PCR System and Applied Biosystems™ 7500 Real-Time PCR Systems | |

ASSAY WORKFLOW





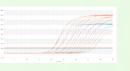












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Tianlong Science and Technology

Mail: inquiry@medtl.com Phone: +86-29-82682132 Website:www.medtl.net Address: No. 4266 Shanglin Road, Xi'an, China