VetMAX-Gold BVDV PI Detection Kit

A USDA-licensed, real-time PCR test for the detection of bovine viral diarrhea virus (BVDV) persistent infection (PI) in cattle

Features

- USDA-licensed
- Real-time PCR–based BVDV PI detection
- Pooling approved for up to 24 samples

Benefits

Unique test

The Applied Biosystems™ VetMAX™-Gold BVDV PI Detection Kit is a USDA-licensed diagnostic test that has successfully passed the USDA's stringent review process. This process confirms both the effectiveness of our real-time PCR test and the compliance of the production and quality systems in our manufacturing site.

Fast and simple to use

- Rapid and cost-effective method for detection of BVDV, with results in ~1.5 hours
- Simple, fast workflow minimizes sample handling and helps reduce sample cross-contamination
- Easily automated for high-throughput processing
- Sample type: ear-punch tissue

Reliable and robust

- USDA-licensed RNA detection kit for BVDV PIs
- Proven repeatability and reproducibility in field studies
  - Repeatability <3.3% CV and reproducibility <2.4% CV in field studies
- Highly sensitive detection of BVDV types 1 and 2
- Designed to consistently detect <40 RNA copies
- Xeno™ RNA internal positive control for confirmation of both positive and negative results

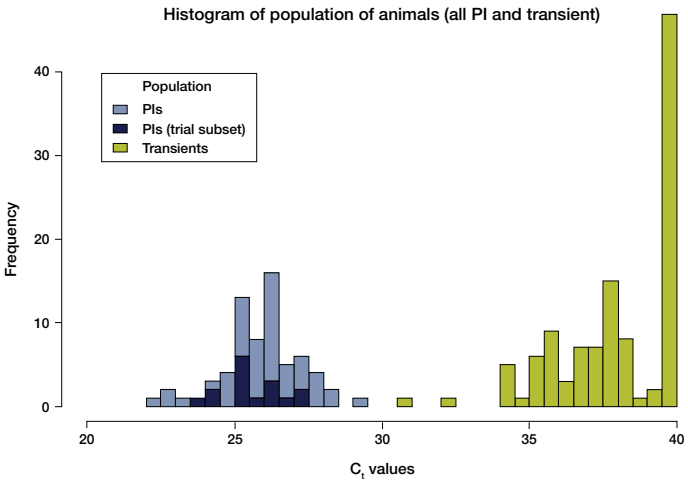
Economical

- Approved for use with single samples or pooled samples of up to 24 animals
- Automated solutions for high-throughput testing

Confidence in results backed by data

The VetMAX-Gold BVDV PI Detection Kit has been tested extensively. In a USDA study, 126 pools were created (24 animals per pool) and tested using the VetMAX-Gold BVDV PI Detection Kit. In this study, there were 63 positive PI pools, 51 negative PI pools, and 12 transiently infected (TI) pools. To demonstrte the reproducibility and repeatability of the VetMAX-Gold BVDV PI Detection Kit, purified RNA from 14 BVDV reference strains (and 6 negative samples) were tested. Testing took place on two consecutive days at three independent laboratories with two different manufactured lots of reagents. The reproducibility study generated coefficients of variation (CV) of the BVDV C_t values ranging from 0.4% to 3.3%; the repeatability studies generated coefficients of variation

ranging from 0.8% to 2.4%. <5% CV is considered excellent consistency. The amount of variation measured in %CV (C_t standard deviation/average x 100%) was <3.1%, indicating excellent consistency across runs.



No overlap of PI and TI C_ts between 29.49 and 30.51.

Bovine viral diarrhea virus

The VetMAX-Gold BVDV PI Detection Kit is intended for use in the rapid, *in vitro* detection of BVDV RNA extracted from ear notches in persistently infected cattle.

BVDV infection can cause considerable economic losses in the dairy and beef industries.

The virus crosses placenta in infected pregnant cows, causing reproductive losses due to abortions, stillborn calves or calves that die early in life. In addition, when cows become infected between days 30 and 150 of gestation, some calves survive and are persistently infected.

These persistently infected cattle are the main source of BVDV transmission, producing and excreting large amounts of virus. As a result, most eradication and control programs focus on elimination of persistently infected animals and preventing the transmission of BVDV to other healthy cattle in the herd.

Prevalence of persistently infected animals has been measured at approximately 0.1% to 2%, based on numerous studies around the world. However, despite low prevalence levels in the overall cattle population, the risk of introducing a persistently infected animal into a herd or group of cattle can be high in most areas.

Ordering information

Product	Type	Quantity	Cat. No.
VetMAX-Gold BVDV PI Detection Kit	Real-time PCR	100 reactions	4413938
Workflow products			
MagMAX Total Nucleic Acid Isolation Kit	Sample prep	100 reactions	AM1840
MagMAX Pathogen RNA/DNA Kit	Sample prep	480 or 5 x 96 reactions	4462359
KingFisher Flex Magnetic Particle Processor with 96 Deep-Well Head	Sample prep	1 instrument	5400630
Applied Biosystems 7500 Fast Real-Time PCR System with Dell Notebook	Analysis	1 instrument	4365464
Related products			
VetMAX-Gold Trich Detection Kit	Real-time PCR	100 reactions	4483869
VetMAX MAP (Johne's) Reagents	Real-time PCR	100 reactions	4405545
VetMAX MAP (Johne's) Controls	Real-time PCR	Varies	4405546

Find out more at **thermofisher.com/animalhealth**

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