

# Fast detection of PI animals. PrioCHECK® BVDV RT-PCR



**REAL TIME RT-PCR KIT FOR THE DETECTION OF BOVINE VIRAL  
DIARRHEA IN ANIMALS OF ALL AGES.**

- HIGH DIAGNOSTIC SENSITIVITY AND SPECIFICITY
- FOR USE WITH EAR NOTCH SAMPLES, BLOOD SAMPLES  
AND PURIFIED EAR NOTCH EXTRACTS
- COST REDUCTIONS ACHIEVED THROUGH LARGE SAMPLE POOLING

# PrioCHECK® BVDV RT-PCR

## Real Time RT-PCR Test for BVDV



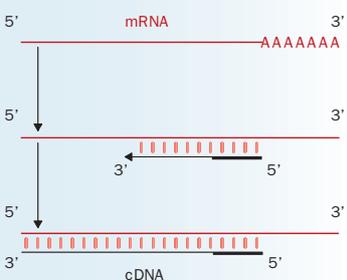
### BOVINE VIRAL DIARRHEA

An outbreak of Bovine Viral Diarrhea (BVD) can have significant and serious economic implications to the milk and meat production industry. The BVD virus (BVDV) can cause spontaneous abortions in cows or result in the transplacental spread of the virus to newborn calves, making them persistently infected (PI). The presence of maternal antibodies in these animals can interfere with the detection of BVDV in serological tests (i.e. shielding). As a result, unidentified PI animals can remain in a herd and can spread the infection to other cattle, endangering the success of a BVDV farm control or eradication program.

The PrioCHECK® BVDV RT-PCR detects BVDV infections in animals of all ages, including PI animals. The test is a real time RT-PCR for the detection of viral RNA in ear notch tissue and blood. It is possible to pool up to 12 ear notch samples and up to 50 blood samples, making the test very economical. After RNA purification pre-treatment, the pool size for ear notch tissue can be even increased to 24 samples. With an amplification time of only 100 minutes the test is very fast.

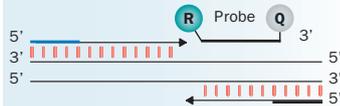
### PrioCHECK® BVDV RT-PCR

#### Reverse transcription

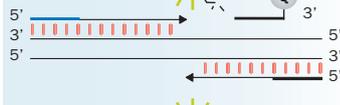


- Forward primer
- Reverse primer
- R Reporter
- Q Quencher

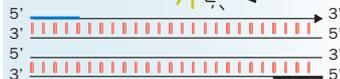
#### Amplification



#### Cleavage



#### Polymerization



### WHAT ARE THE BENEFITS OF THE PrioCHECK® BVDV RT-PCR?

#### Fast and simple to use

- amplification time of only 100 minutes
- reverse transcription and DNA amplification in one step
- simple ear notch sample preparation with Ear Notch Lysis Buffer
- all reagents needed for the detection of BVDV RNA are included in the test

#### Reliable and robust

- high diagnostic and analytical sensitivity (~10 RNA copies in lysates)
- uses taqman probes
- RNA amplification control
- validated with most commonly used real time PCR instruments

#### Economical

- pools of up to 12 ear notch samples can be reliably tested
- up to 50 blood samples can be pooled
- up to 24 RNA purified ear notch tissue samples can be pooled
- Prionics offers automation solutions for high-throughput testing

### EXCELLENT SENSITIVITY AND SPECIFICITY

The PrioCHECK® BVDV RT-PCR was tested extensively both in a field trial and in BVDV ring trials with excellent results. In the field trial, 558 negative samples of different origins were recognized correctly, resulting in a specificity of 100%. The sensitivity was determined at 99.7%; 576 out of 578 positive samples were detected correctly. The test works with both ear tissue lysates and blood samples.



### PrioCHECK® BVDV RT-PCR

Prod. No. 7710600 (192 reactions)

### Ear Notch Lysis Buffer

Prod. No. 7710700 (500 ml)

### CONTACT INFORMATION

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