PCR Test for the Detection of Bluetongue Type 8

Product Categories: Bio X, PCR, Veterinaria

Product Page: http://vacunek.com/shop/veterinaria/pcr-test-for-the-detection-of-bluetongue-type-8-2/

Product Summary

ADI381-50

Product Description

1. Purpose of the test
ADIAVET™ BTV TYPE 8 REAL TIME kit is intended to detect the Bluetongue Virus (BTV) serotype 8 using
real-time Polymerase Chain Reaction (PCR) technology from whole blood specimen of bovine and
ovine.
2. Pathogen
The bluetongue virus is a non-contagious viral arthropod-borne infectious disease due to an Orbivirus
(family Reoviridae, virus ARN), mainly transmitted by hematophageous midges from Culicoides genus.
The disease is found in countries where these midges are prevalent and clinical cases have been
reported in Africa, the Middle East, the USA, Asia and southern Europe. It induces

serious syndromes by
ovine (fever, oedema, slimming, mortality 1 to 10%), but it is mainly asymptomatic by caprine, domestic
or wild ruminants, which are the virus reserve.
The clinical expression is widely dependent on the environmental parameters (nutritional state,
parasitism and bacterial infections concomitant) and on the individual sensitivity.
26 distinct serotypes
exist inducing partial or no cross protections between them.
Under the natural conditions, the dissemination is exclusively the fact of infected biting midge or the
seed of infected males. The diffusion of the disease thus is largely influenced by the activity of the
midge.
Transmission by pregnant ewes has also been described. Transmission by contaminated blood injection
is possible when needles and syringes are re-used.
Samples for virus detection are bloods of animals with anticoagulants (EDTA). Virus is detected by
isolation on embryonated eggs, in vitro cell culture, immunofluorescence on cell culture or by PCR.
3. Description and purpose of the test
This test is based first on the reverse transcription (RT) of RNA into complementary DNA. Then, cDNA is
amplified (PCR) by a DNA polymerase using specific primers. Both enzymatic reactions occur in the
same tube (One-step RT-PCR).
Amplified products are detected in real-time thanks to a specific labelled hydrolysis probe (5'-
exonulease technology).
The ADIAVET™ BTV TYPE 8 REAL TIME kit enables the simultaneous detection of:

- The Bluetongue Virus Type 8 (probe labelled in FAM),
- The GAPDH, an internal control of extraction and amplification steps specific from an
endogenous RNA (probe labelled with a fluorochrome with the same spectra as VIC and
HEX).

ADIAGENE validated the test using RNA purification kits (Qiagen, Macherey-Nagel). Other purification
kits can be used if they have been validated by the user.