

ViroReal® Kit TGEV



For veterinary use only

ViroReal® Kit TGEV

Order no.	Reactions	Pathogen	Internal positive control
DVEV01213	100	VIC/HEX channel	Cy5 channel
DVEV01253	50	VIC/HEX channel	Cy5 channel

Kit contents:

- Detection assay for TGEV
- Detection assay + target for internal RNA positive control (control of RT-PCR amplification and/or RNA extraction)
- RNA reaction mix
- Nuclease-free water
- Positive control (RNA) for TGEV



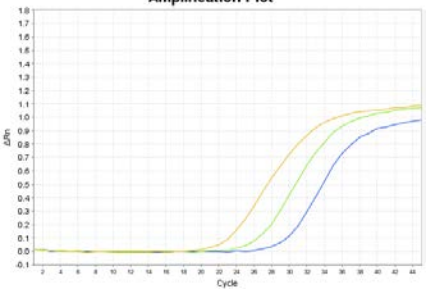
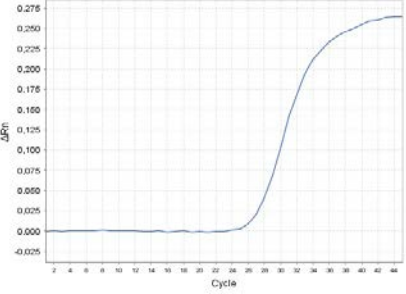
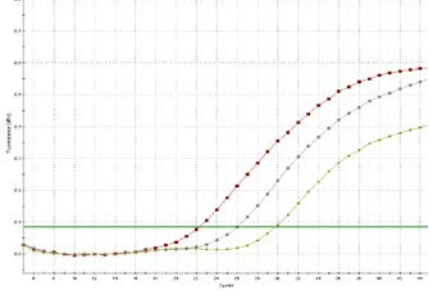
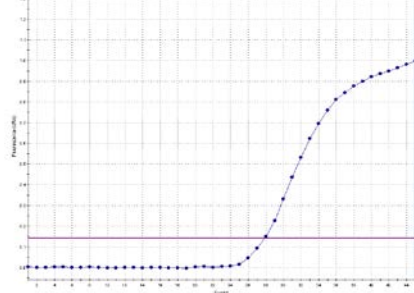
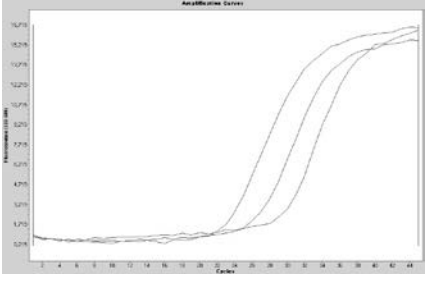
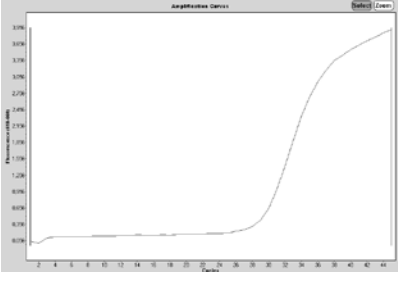
Background: The family *Coronaviridae* includes pathogenic porcine coronaviruses such as the transmissible gastroenteritis virus (TGEV), the porcine respiratory coronavirus (PRCV), the porcine epidemic diarrhea virus (PEDV) and the porcine hemmaglutinating encephalomyelitis virus (PHEV). TGEV causes transmissible gastroenteritis (diarrhea and vomiting) in pigs, mortality is highest in neonates. PRCV is a mutant of TGEV and does not appear to be an important primary pathogen.

Description: ViroReal® Kit TGEV is based on the amplification and detection of a part of the S region of TGEV using one-step reverse transcription real-time PCR. It allows the rapid and sensitive detection of RNA of the transmissible gastroenteritis coronavirus (TGEV) from samples purified from nasal swabs and feces (e.g. with the QIAamp Viral RNA Mini Kit). The test does not detect PRCV that has a large in-frame deletion in the 5' end of the S gene.

PCR-platforms: ViroReal® Kit TGEV is developed and validated for the ABI PRISM® 7500 instrument (Thermo Fisher Scientific), LightCycler® 480 (Roche) and Mx3005P® QPCR System (Agilent), but is also suitable for other real-time PCR instruments.

Specificity and sensitivity: ViroReal® Kit TGEV has a sensitivity of 3 RNA copies/PCR. The limit of detection (LoD95 = smallest number of copies of target RNA which can be detected in 95% of cases) is 17 target copies/reaction and was determined by several replicates around the detection limit. The kit is specific for TGEV. It was tested with one TGEV, one PHEV, three PEDV, eight PRRSV EU, four PPV and seven PCV2 strains. It was positive with TGEV and showed no cross-reaction with the others.

References: Saif LJ, Sestak K: 2006. Transmissible gastroenteritis and porcine respiratory coronavirus. In: Diseases of Swine, 9th ed. Straw BE, Zimmerman JJ, D'Allaire S, Taylor DJ eds. Blackwell Publishing, Ames, IA. Pp 489-516.

<p style="text-align: center;">Detection of TGEV VIC/HEX channel</p>	<p style="text-align: center;">Detection of internal positive control Cy5 channel</p>
<p style="text-align: center;">Amplification Plot</p>  <p>ABI Prism® 7500: VIC channel, 554 nm 1:10 serial dilution of a TGEV RNA positive control</p>	<p style="text-align: center;">Amplification Plot</p>  <p>ABI Prism® 7500: Cy5 channel, 667 nm Detection of internal RNA positive control</p>
 <p>Mx3005P®: HEX channel 1:10 serial dilution of a TGEV RNA positive control</p>	 <p>Mx3005P®: CY5 channel Detection of internal RNA positive control</p>
<p style="text-align: center;">Amplification Curve</p>  <p>LightCycler® 480: VIC/HEX/Yellow555 channel 1:10 serial dilution of a TGEV RNA positive control</p>	<p style="text-align: center;">Amplification Curve</p>  <p>LightCycler® 480: Cy5 channel, 667 nm Detection of internal RNA positive control</p>

**ViroReal®, BactoReal® and ParoReal Kits run with the same thermal cycling conditions.
RNA and DNA material can be analysed in one PCR run.**

For further information on our products please visit our homepage (www.ingenetix.com)