

ViroReal[®] Kit Rotavirus



For veterinary use only

ViroReal[®] Kit Rotavirus

Order no.	Reactions	Pathogen	Internal positive control
DVEV01713	100	FAM channel	Cy5 channel
DVEV01753	50	FAM channel	Cy5 channel
DVEV01711	100	FAM channel	VIC/HEX channel
DVEV01751	50	FAM channel	VIC/HEX channel

Kit contents:

- Detection assay for rotavirus
- 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 rotavirus



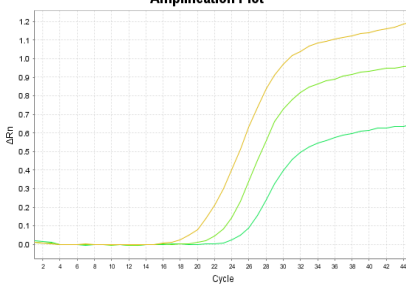
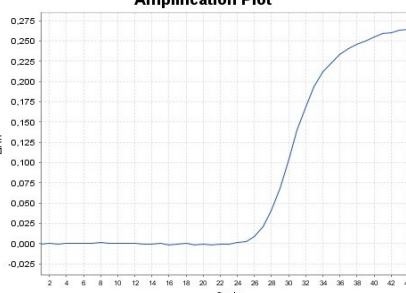
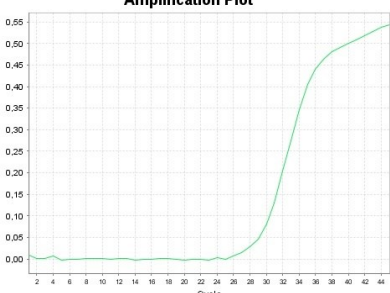
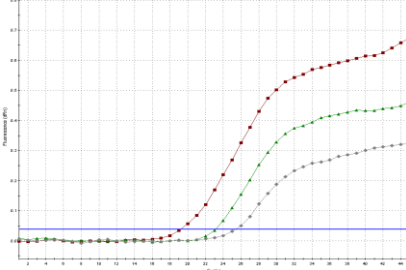
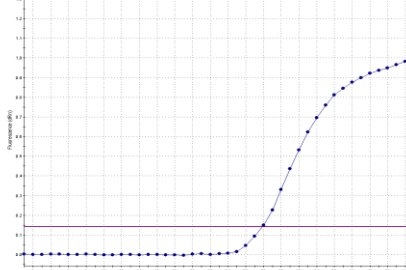
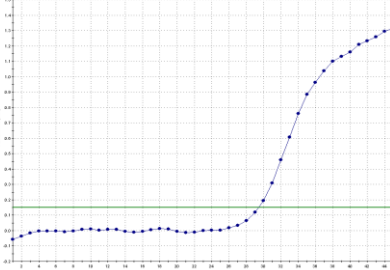
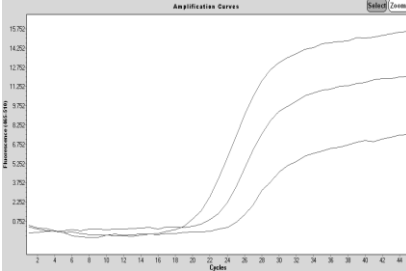
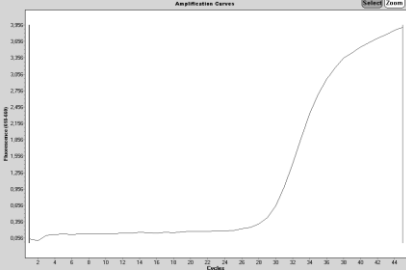
Background: Rotavirus is a segmented double-stranded (ds) RNA virus of the family *Reoviridae* and is classified into at least 7 groups (A to G). This virus is the causative agent of severe diarrhoea in almost every mammal species (especially cattle, pig, dog, cat horse and humans) and birds. Rotaviruses are thought to be mostly species specific, but some transmission between species occurs. Rotaviruses of group A–C infect both humans and animals, while rotaviruses of group D–G infect only animals. Group A is the most prevalent one and causes approximately 90% of infections in animals and humans. Furthermore, pigs can be sporadically also infected by group B, C and E. Cattles are sporadically also infected by group B and C. Group D, F and G are found in avians.

Description: ViroReal[®] Kit Rotavirus is based on the amplification and detection of a part of the non-structural protein 4 (NSP4), a transmembrane ER-specific glycoprotein, using one-step reverse transcription real-time PCR. It allows the rapid and sensitive detection of RNA of rotavirus genotype A, of most strains of genotype B and C, and of some strains of the other genotypes D, E, F and G from samples purified from fecal specimen (e.g. with the QIAamp Viral RNA Mini Kit).

PCR-platforms: ViroReal[®] Kit Rotavirus 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.

Sensitivity and Specificity: ViroReal[®] Kit Rotavirus detects at least 100 RNA target copies/reaction. The limit of detection (LoD₉₅ = smallest number of copies of target RNA which can be detected in 95% of cases) is 115 target copies/reaction. ViroReal[®] Rotavirus is specific for rotavirus strains of genotype A, most strains of genotype B and C, and some strains of the other genotypes D, E, F and G.

References: N. Kobayashi, M. Ishino, Y-H. Wang, M. Chawla-Sarkar, T. Krishnan, and T.N. Naik. 2007. Diversity of G-type and P-type of human an animal rotaviruses and its genetic background. *Communicating Current Research and Educational Topics and Trends in Applied Microbiology*: 847 – 858.

<p>Detection of rotavirus</p>	<p>Detection of internal RNA positive control IPC-3</p>	<p>Detection of internal RNA positive control IPC-1</p>
<p>Amplification Plot</p> 	<p>Amplification Plot</p> 	<p>Amplification Plot</p> 
<p>ABI Prism® 7500: FAM channel, 530 nm 1:10 dilution of a rotavirus RNA positive control</p>	<p>ABI Prism® 7500: Cy5 channel, 667 nm Detection of internal RNA positive control</p>	<p>ABI Prism® 7500: VIC channel, 554 nm Detection of internal RNA positive control</p>
		
<p>Mx3005P®: FAM channel 1:10 dilution of a rotavirus RNA positive control</p>	<p>Mx3005P®: CY5 channel Detection of internal RNA positive control</p>	<p>Mx3005P®: HEX channel Detection of internal RNA positive control</p>
<p>Amplification Curves</p> 	<p>Amplification Curves</p> 	
<p>LightCycler® 480: FAM channel 1:10 dilution of a rotavirus RNA positive control</p>	<p>LightCycler® 480: Cy5 channel 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)