

ViroReal® Kit PHEV



For veterinary use only

ViroReal® Kit PHEV

Order no.	Reactions	Pathogen	Internal positive control
DVEV01513	100	FAM channel	Cy5 channel
DVEV01553	50	FAM channel	Cy5 channel
DVEV01511	100	FAM channel	VIC/HEX channel
DVEV01551	50	FAM channel	VIC/HEX channel

Kit contents:

- Detection assay for porcine hemagglutinating encephalomyelitis virus (PHEV)
- 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 PHEV



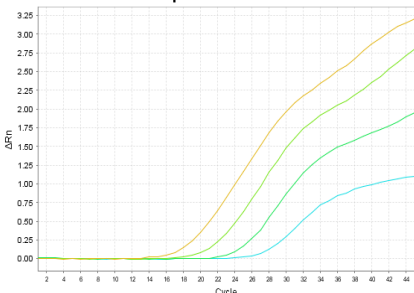
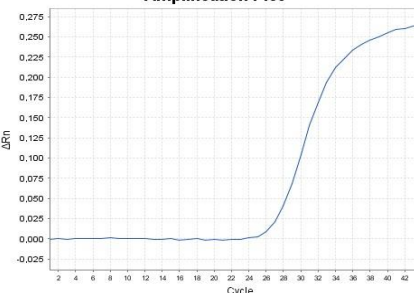
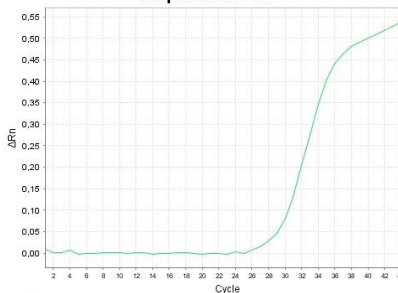
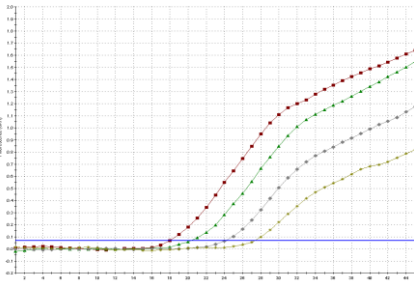
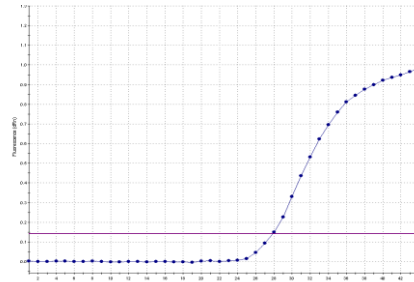
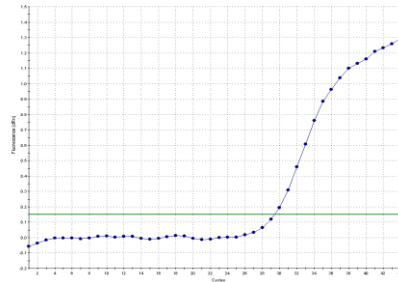
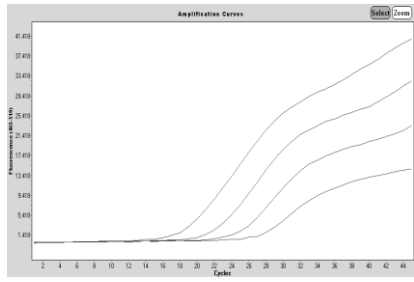
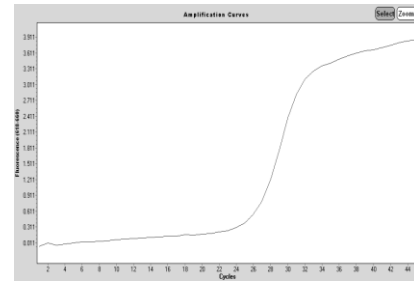
Background: Porcine hemagglutinating encephalomyelitis virus (PHEV), an RNA virus, is a member of the genus *Coronavirus (Betacoronavirus)*, family *Coronaviridae*, and primarily infects pigs less than three weeks old. This viral disease of piglets is characterized by vomiting, anorexia and neurological symptoms and results either in rapid death or chronic emaciation (vomiting and wasting). The mortality rate in infected piglets under three weeks old is nearly 100 %, but the incidence of infection is small as most piglets are protected by maternal antibodies. Clinically apparent disease develops only when young piglets from non-immune sows are exposed. The virus is spread via aerosol.

Description: ViroReal® Kit PHEV is based on the amplification and detection of the nucleocapsid protein gene (N gene) of the PHEV using one-step reverse transcription real-time PCR. It allows the rapid and sensitive detection of RNA of the PHEV from samples purified from nasal epithelial mucosa (nasal swabs), tonsil, brain or lung tissue (e.g. with the QIAamp Viral RNA Mini Kit).

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

Specificity and sensitivity: ViroReal® Kit PHEV has a sensitivity of 10 target copies/PCR reaction. The limit of detection (LoD95 = smallest number of copies of target RNA which can be detected in 95% of cases) is 36 target copies/reaction and was determined by several replicates around the detection limit. ViroReal® Kit PHEV was tested against RNA isolates of bovine coronavirus, PHEV, TGEV and PEDV. It detects all PHEV strains published in the NCBI database and does not cross-react with other types of coronaviruses, except bovine coronavirus.

References: Quiroga M A et al. 2008. Hemagglutinating Encephalomyelitis Coronavirus Infection in Pigs, Argentina. *Emerg Infect Dis.* 14:484-486.

<p>Detection of PHEV</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 serial dilution of a PHEV 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 serial dilution of a PHEV 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>LightCycler® 480: FAM channel 1:10 serial dilution of a PHEV 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)