

# ViroReal® Kit Human Coronavirus beta



## ViroReal® Kit Human Coronavirus beta

Order no.	Reactions	Pathogen	Internal positive control
DHUV01253	50	FAM + VIC/HEX channel	Cy5 channel

*For Research Use Only. Not for use in diagnostic procedures.*

### Kit contents:

- Detection assay for OC43, HKU1 and MERS
- Detection assay + target for internal RNA positive control (control of RT-PCR amplification and RNA extraction)
- RNA amplification mix
- Nuclease-free water
- Positive control (RNA) for OC43, HKU1 and MERS



**Background:** Coronaviruses are positive single-stranded (+)ssRNA RNA viruses of the family *Coronaviridae*. Several different strains of coronaviruses are currently known to infect humans (HCoV-229E, HCoV-NL63, HCoV-OC43, HCoV-HKU1, MERS-CoV, SARS-CoV, NCoV and HCoV-EMC). Strains HCoV-229E, HCoV-NL63, HCoV-OC43, MERS-CoV and HCoV-HKU1 cause cold, upper respiratory infection, bronchiolitis and pneumonia in humans. SARS-CoV causes the Severe Acute Respiratory Syndrome.

**Description:** ViroReal® Kit Human Coronavirus beta is a test detecting RNA of the N gene of human coronavirus OC43, HKU1 and MERS using one-step reverse transcription multiplex real-time PCR (RT-PCR). This test allows the rapid and sensitive detection and differentiation of RNA of OC43, HKU1 and MERS from samples purified from the respiratory tract (e.g. with the QIAamp Viral RNA Mini Kit, Qiagen).

HCoV-OC43 and HCoV-HKU1 are detected in FAM channel (530 nm), HCoV-MERS is detected in VIC/HEX channel (554 nm).

The internal RNA positive control (RNA IPC) is detected in Cy5 channel and is used as RNA extraction as well as RT-PCR inhibition control. The RNA IPC target is extracted with the sample.

**PCR-platforms:** This kit has been validated with Applied Biosystems® 7500 Fast Real-time PCR System (Thermo Fisher Scientific) and tested with LightCycler® 480 Instrument II (Roche) and Mx3005P® QPCR System (Agilent). It is compatible with real-time PCR instruments detecting and differentiating fluorescence in FAM, VIC/HEX and Cy5 channel.

**Specificity:** ViroReal® Kit Human Coronavirus alpha is specific for so far known OC43, HKU1 and MERS strains.

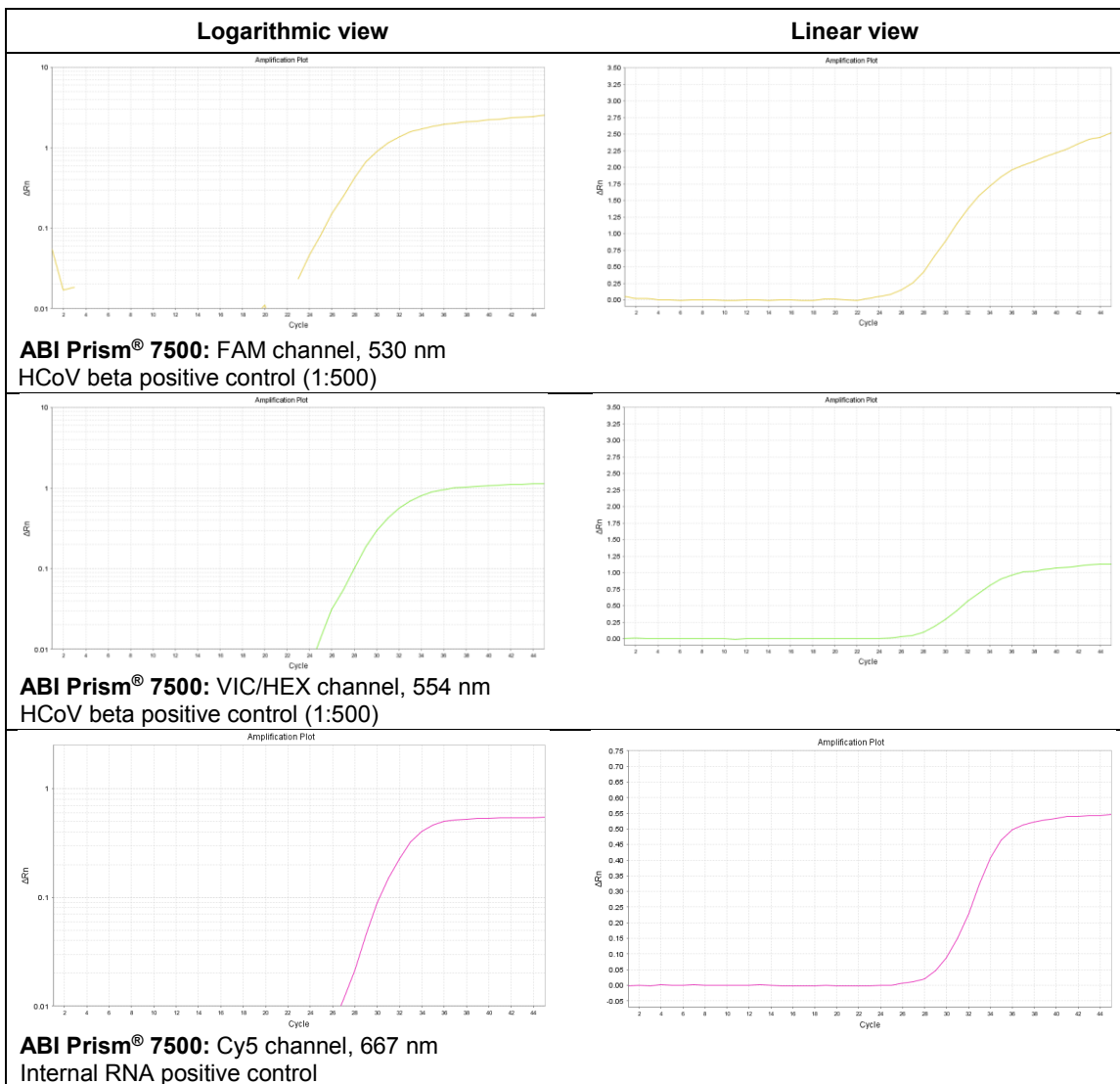


Figure 1 Performance of ViroReal® Kit Human Coronavirus beta

For further information on our products please visit our homepage ([www.ingenetix.com](http://www.ingenetix.com))