

ViroReal® Kit African Swine Fever Virus



Kit approved by Friedrich-Loeffler-Institute: no. FLI-C056

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Order no.	Reactions	Pathogen	Internal positive control
DVEV02013	100	FAM channel	Cy5 channel
DVEV02053	50	FAM channel	Cy5 channel

Kit contents:

- Detection assay for ASFV
- Detection assay + separate target for internal DNA positive control (control of PCR amplification and DNA extraction)
- DNA reaction mix (contains uracil-N glycosylase, UNG)
- Positive control for ASFV
- Water



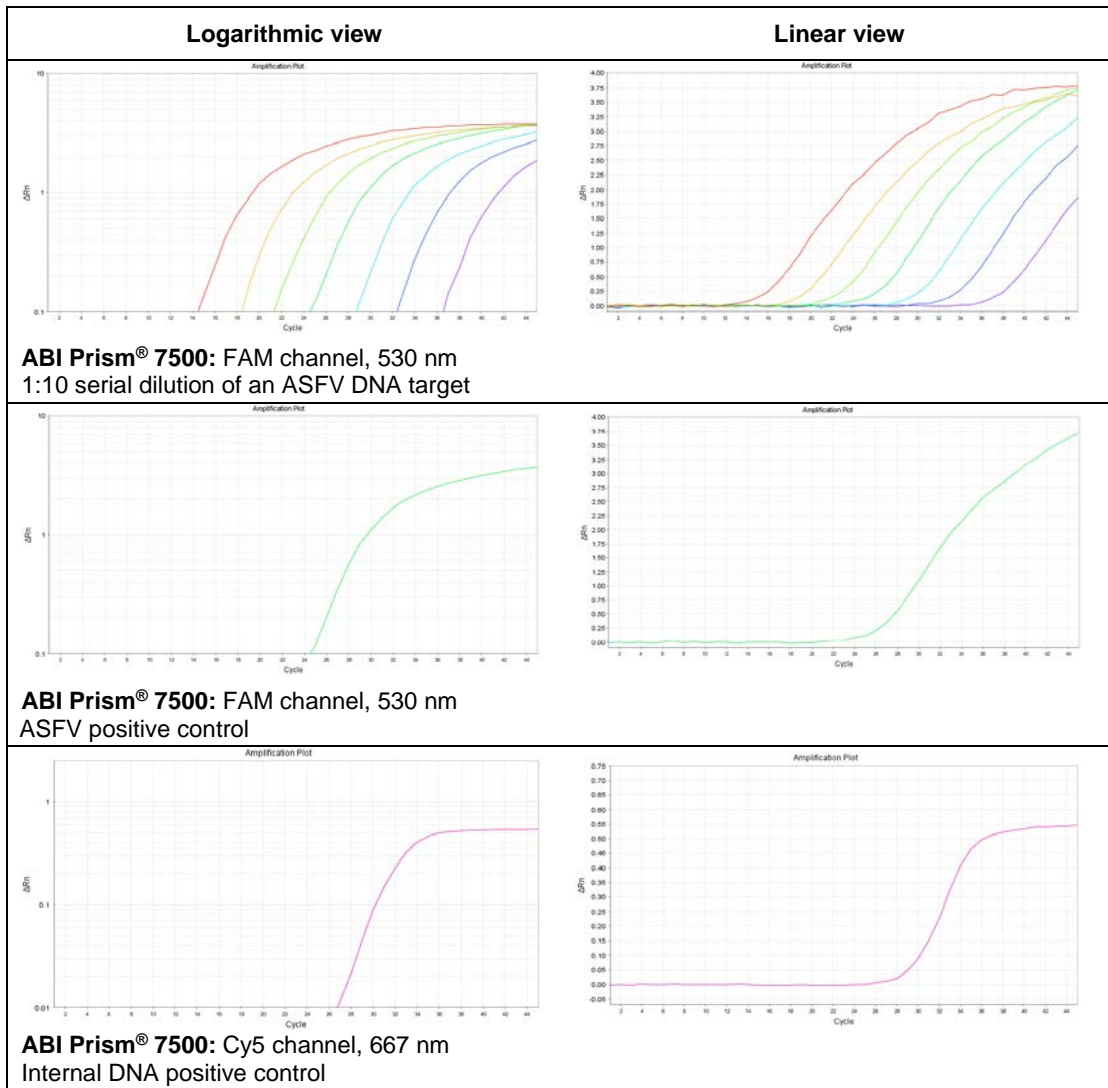
Background: African swine fever virus (ASFV) is the only member of the *Asfarviridae* family and is a large, double-stranded DNA virus which replicates in the cytoplasm of infected cells. This virus is the causative agent of African swine fever, a haemorrhagic fever with high mortality rates in domestic pigs, European wild boar and American wild pigs. Its natural hosts (warthogs, bushpigs) are usually inapparently infected and act as reservoir hosts of ASFV in Africa. Soft ticks (*Ornithodoros*) likely act as a vector. ASFV is endemic to sub-Saharan Africa. In the last years outbreaks sporadically occurred also outside Africa.

Description: ViroReal® Kit African Swine Fever Virus is based on the amplification and detection of the major capsid protein gene p72 of ASFV. It allows the rapid and sensitive detection of DNA of ASFV from samples purified from blood, lymph nodes, spleen, or serum (e.g. with the QIAamp DNA Mini Kit or QIAamp DSP Virus Kit).

PCR-platforms: ViroReal® Kit African Swine Fever Virus is developed and validated for the Applied Biosystems® 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 African Swine Fever Virus has an analytical sensitivity of one copy/PCR. The limit of detection (LoD95 = smallest number of copies of target DNA which can be detected in 95% of cases) is 10.5 target copies/reaction and was determined by several replicates around the detection limit. The assay is specific for ASFV. Genotypes IX and X (found in Tanzania and Kenya) might not be detected by this kit.

References: Oura CA, Edwards L, Batten CA. 2013. Virological diagnosis of African swine fever - comparative study of available tests. *Virus Res.* 173:150–8.



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)