

NEW! genesig® qPCR Detection Kits for African Swine Fever Virus

Fast and accurate detection of ASFV infection in pigs, including emerging strain ASFV-SY18

African swine fever virus (ASFV) causes haemorrhagic fever in pigs that leads to high mortality rates in affected herds. Since **August 2018, ASFV has caused outbreaks of the disease in large parts of China**, leading to 200,000 pigs being culled to try to prevent its spread. This new outbreak has been linked to the emergence of a new strain ASFV-SY18, and the virus has recently been spreading across Eastern Europe, and has been confirmed in Russia. It is known that ASFV can be spread by live or dead pigs, and pork products, which means that all countries are on high alert to prevent this global veterinary threat. The **genesig qPCR Detection Kits for African Swine Fever Virus** allows early detection of ASFV to enable fast isolation of pigs to help prevent further outbreaks.

Description of genesig qPCR Detection Kits for ASFV

The **genesig qPCR Detection Kits for ASFV** is for the highly sensitive and specific detection of ASFV, including the most recent Asian strain emerging in China (ASFV-SY18), to at least 100 copies of target. The kits are available in Standard and Advanced formats for use on open platform, and the Easy Kit format for use on the genesig q16 instrument. The genesig qPCR Detection Kits for ASFV is ideal for testing samples from pigs and wild boars, such as whole blood, plasma, serum, tissues and swabs. With results within 60 minutes, the kits allow for rapid screening during outbreaks. As the kits come lyophilised, they can be shipped quickly and easily at room temperature to the testing site.

Performance data

A genesig qPCR Detection Kit for ASFV assay was developed for detection of ASFV, including the most recent Asian strain emerging in China (ASFV-SY18). Due to sequence variation between strains, three probes were designed to capture these specifications and incorporated into the qPCR kit. A validation plate to assess the Advanced Kit format efficiency and sensitivity was run on a BioRad CFX to show standard curve data.

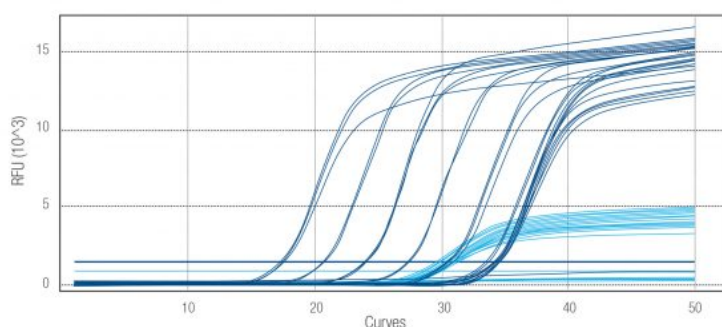


Figure 1: Output from the BioRad CFX standard curve on the ASFV-SY18 template using the genesig® qPCR Advanced Detection Kit for ASFV. Amplification plots from the ASFV assay on the FAM channel (dark blue) and IEC assay on the HEX channel (light blue).

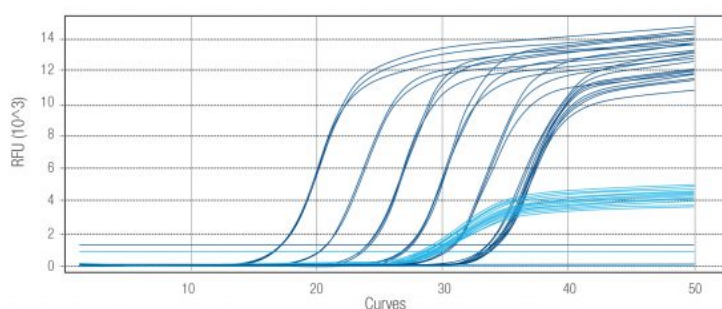


Figure 2: Output from the BioRad CFX standard curve on the 'European and African strain' ASFV template using the genesig® qPCR Advanced Detection Kit for ASFV. Amplification plots from the ASFV assay on the FAM channel (dark blue) and IEC assay on the HEX channel (light blue).

The data shown in Figures 1 and 2 demonstrate that the genesig qPCR Detection Kits for ASFV Kit run on the

BioRad CFX gave smooth, sigmoidal amplification plots on both templates with the Cqs being in the target range in both instances. The assay gave exceptional PCR efficiency on both templates, being 101% and 100% for the SY18 and European and African templates respectively. This demonstrates that the design is functioning optimally and has excellent strain coverage, with detection equal on the European, African and Asian (Chinese) strains. The sensitivity, specificity and priming efficiency of the kit have also been confirmed when running on the genesig q16 with templates that simulate ASFV strains from various global locations to demonstrate maximal strain coverage and equal kit performance over these various strains, including extremely reproducible 10 copy detection.



The genesig q16: The easiest, most affordable qPCR instrument on the market

The genesig Easy qPCR detection kits are specially optimised for the **genesig q16**. We have developed the genesig q16, the world's smallest and very portable molecular testing platform. The genesig q16 is cost-effective, easy to use, and provides high-quality results within 60 minutes. It can test up to 14 samples and 2 controls at a time with fast data analysis. This platform was designed to make DNA/RNA testing easy for anyone in the veterinary industry.

Open qPCR Platform Kits

We also offer the genesig Advanced qPCR detection kit which is an open qPCR platform format, for use on any qPCR instrument. To see our full range of veterinary kits, please [visit our website](#) and if you still cannot find a specific pathogen of interest then we can **make new kits OnDemand**.