

# Feline Calicivirus

Feline calicivirus (FCV) is a small single-stranded RNA virus that is widespread in the feline population. Clinical signs of FCV infection include pyrexia, oral ulceration and upper respiratory tract disease.

## Diagnosis

Diagnosis of FCV infection has traditionally been by virus isolation from oropharyngeal swabs since the virus grows very well in cultures of feline cells. Replication of this RNA virus leads to the evolution of many different strains, which vary in their genetic sequence.



The Molecular Diagnostic Unit has developed sensitive and specific quantitative reverse transcription PCR (RT-qPCR) assays to detect a wide range of FCV strains. Reverse transcription is the process by which the RNA of the virus is converted to DNA so that we can detect it in the qPCR.

Development of the FCV assays has been achieved by aligning whole FCV genome sequences from 10-12 different strains and searching for regions of genetic identity, which can subsequently be used for RT-qPCR assay design. Due to the high genetic diversity between different FCV strains there are relatively few target sites to which RT-qPCR primers can be designed.

The FCV RT-qPCR assays have been tested for their ability to detect a wide range of FCV strains from our diagnostic sample archive to minimise the chance of false-negative results. The assay also incorporates several internal amplification controls to ensure that valid results are produced every time.

## Reception Hours

Mon-Fri 9am - 5pm

## Contact Us

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