Norgen’s Feline Infectious Peritonitis Virus (FIPV) RT-PCR Detection Kit constitutes a complete, ready-to-use system for the isolation and detection of FIPV using end-point PCR. The kit first allows for the isolation of total RNA from blood using a convenient spin-column. The RNA is isolated free from PCR inhibitors, and can then be used as the template in an RT-PCR reaction for detection of FIPV using the FIPV Detection Mastermix. The FIPV Detection Mastermix contains reagents and enzymes for the specific amplification of a 304 bp region of the viral genome. In addition, Norgen’s FIPV RT-PCR Detection Kit contains a second Mastermix, the RT-PCR Control Master Mix, which can be used to identify possible PCR inhibition and/or inadequate isolation via a separate RT-PCR reaction with the use of the provided PCR control (PCCR) or Isolation Control (Isc), respectively. The kit is designed to allow for the testing of 24 samples and is ideal for use in surveillance of drug resistant pathogens, epidemiological studies, field surveillance of pathogens and surveys.

Feline infectious peritonitis (FIP) is a viral disease of cats caused by the Feline Infectious Peritonitis Virus (FIPV), which is a strain of feline coronavirus. Most strains of feline coronavirus are avirulent, which means that they do not cause disease, and are referred to as feline enteric coronavirus. Cats infected with a feline coronavirus generally do not show any symptoms during the initial viral infection. Feline coronaviruses can be found in large quantities in the saliva and feces of cats during the acute infection and to a lesser extent in recovered or carrier cats, so it can be transmitted through cat-to-cat contact and exposure to feces. In a small percent of infected cats (5 to 10 percent), the infection progresses into clinical FIP either by a mutation of the virus or by an aberration of the immune response. The virus is then referred to as feline infectious peritonitis virus (FIPV), and typically higher concentrations of the virus can then be detected in blood samples. Once symptoms develop, often there is increasing severity over the course of several weeks, ending in death. Any cat that is a carrier of any coronavirus is at risk of developing FIP.
**Feline Infectious Peritonitis Virus RT-PCR Detection Kit**

**Contents:**
1. Lysis Solution
2. Wash Solution
3. Elution Buffer
4. Mini Spin Columns
5. Collection Tubes
6. Elution tubes (1.7 mL)
7. 2x FIPV Detection RT-PCR Master Mix
8. 2x RT-PCR Control Master Mix
9. FHV Isolation Control (IsoC)
10. FHV Positive Control (PosC)
11. Nuclease-Free Water
12. Norgen’s RNA Marker
13. Product Insert

**Storage Conditions**
All buffers should be kept tightly sealed and stored at room temperature (15-25°C). Buffers can be stored for up to 1 year without showing any reduction in performance. The FIPV Positive Control (PosC) and the FIPV Isolation Control (IsoC) should be kept tightly sealed and stored at -70°C for up to 1 year without showing any reduction in performance. The 2x FIPV RT-PCR Master Mix and 2x RT-PCR Control Master Mix should be kept tightly sealed and stored at -20°C for up to 1 year without showing any reduction in performance. Repeated thawing and freezing (> 2 x) should be avoided, as this may reduce the sensitivity. If the reagents are to be used only intermittently they should be frozen in aliquots.

**Figure 1. Sensitivity of Detection using the Feline Herpes Virus PCR Detection Kit.** A representative 1X TAE 1.5% agarose gel showing the amplification of FIPV at different concentrations (FIPV Target). The size of the FIPV target amplicon corresponds to 304 bp as represented by the provided DNA Marker (M). NTC = Negative Control.

**Figure 2. Provided Heterologous Reactions for RT-PCR Control.** A representative 1X TAE 1.7% agarose gel showing the amplification of Isolation Control and PCR Control under different conditions using the provided 2X RT-PCR Control Master Mix. The size of the Isolation Control amplicon and PCR Control amplicon correspond to 499 bp and 150 bp, respectively, as represented by the provided DNA Marker (M). Lanes 1 to 5 showed detection of both Isolation Control and PCR Control, suggesting that the DNA isolation as well as the RT-PCR reaction was successful. Lane 6 showed only the detection of PCR Control suggesting that while the RT-PCR was successful, the isolation failed to recover even the spiked-in Isolation control. NC = Negative Control.

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<thead>
<tr>
<th>Cat #</th>
<th>Description</th>
<th>Quantity</th>
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<tbody>
<tr>
<td>44400</td>
<td>Feline Infectious Peritonitis Virus PCR Detection Kit</td>
<td>24 tests</td>
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