**What is the Test?**

- The PathFlow™ Rota/Adeno Combi Test Cassette is a rapid chromatographic immunoassay for the qualitative detection of rotavirus and adenovirus in human faeces; the test utilises antibodies specific for rotavirus and adenovirus to selectively detect rotavirus and adenovirus from specimens.

**What is the Disease?**

- Acute diarrhoea disease in young children is a major cause of morbidity worldwide and is a leading cause of mortality in developing countries; rotavirus is the most common agent responsible for acute gastroenteritis, followed by enteric adenoviruses (primarily Ad40 & Ad41).
- Rotavirus infections occur frequently during winter months, they may be endemic (confined to a population) or may spread widely (epidemic). Infections affecting some thousand people have been reported; in the case of hospitalised children with acute enteritis, up to 50% of the samples examined are rotavirus positive.
- Adenoviruses have been isolated throughout the world and can cause diarrhoea in children year-round, frequently seen in children less than two years of age. Further studies indicate adenoviruses are associated with 4-15% of all hospitalised cases of viral gastroenteritis.

**Symptoms**

- Typical symptoms of viral gastroenteritis are; watery diarrhoea, vomiting, headaches, fever and abdominal cramps. Symptoms begin 1-2 days following infection and may last for 1-3 days (rotavirus) or 5-8 days (adenovirus).
- Apart from gastroenteritis, adenovirus primarily causes certain respiratory illnesses, such as; pneumonia, acute pharyngitis, pharyngoconjunctival fever and bronchitis.

**Mortality/Morbidity – Clinical Implications**

- Early and reliable detection so that rotaviruses can be recognised, and further infections avoided, is very important in management of infections; especially within clinical environments.
- Rapid and accurate diagnosis of gastroenteritis due to adenovirus is helpful in establishing the aetiology of gastroenteritis and related patient management.

- Complete system, no additional reagents required.
- Simple and easy to use.
- Rapid result offered. Available after 10 minutes or within 20 minutes.
- In-built procedural control.
- Can be used with both solid and liquid faecal specimens.
- Simultaneous testing for rotavirus and adenovirus.

www.microgenbioproducts.com
Why use PathFlow™

- Diagnostic techniques such as electron microscopy (EM) and nucleic acid hybridisation are expensive and labour-intensive.
- The PathFlow™ Rota/Adeno Combi Test Cassette is a rapid chromatographic immunoassay for the qualitative detection of rotavirus and adenovirus in human faeces, providing results from 10 minutes – offering an easy-to-use, rapid alternative.

### Procedure

**Performance – Tested vs. Latex Agglutination**

<table>
<thead>
<tr>
<th></th>
<th>Rotavirus</th>
<th>Adenovirus</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sensitivity</td>
<td>97.3%</td>
<td>95.2%</td>
</tr>
<tr>
<td>Specificity</td>
<td>97.1%</td>
<td>97.7%</td>
</tr>
<tr>
<td>Accuracy</td>
<td>97.2%</td>
<td>96.8%</td>
</tr>
</tbody>
</table>

**Ordering Information**

- **Code** – M595CE
- **Description** – PathFlow™ Rotavirus/Adenovirus Combi
- **Size** – 25 Test Kits
- **Storage** – 2°C-30°C

**Step 1.** Collect sufficient quantity of faeces (1-2ml/g). Optimum results will be obtained if the assay is performed within 6 hours.

**Step 2.** Solid Specimens – Unscrew the cap on the sample collection tube and collect approximately 50mg of faeces. Liquid Specimens – Hold the dropper vertically, aspirate faecal specimens and then transfer 2 drops (approximately 50µl) into specimen collection tube. Tighten the cap on the specimen collection tube and shake vigorously, leave for 2 minutes. Bring the pouch to room temperature before opening it, remove the cassette and use within one hour.

**Step 3.** Hold the specimen collection tube upright and open the cap onto the specimen collection tube. Invert the collection tube and transfer 2 full drops of extracted specimen (approximately 80µl) to the specimen well on the test cassette and start the timer.

**Step 4.** Read the result after 10 minutes, do not read after 20 minutes.