DiaSource

Adenovirus-Norovirus-Rotavirus Rapid Tests

Adenovirus

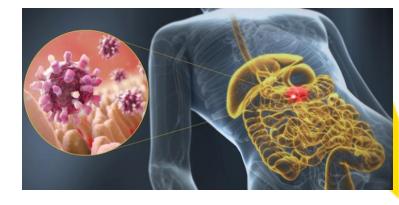
Overview Adenovirus

Adenoviruses are common and typically cause mild cold or flu-like symptoms. There are approximately 50 types of adenoviruses that cause infections in humans. The different types infect different parts of your body.

Adenoviruses can cause a wide range of signs and symptoms, such as:

- common cold or flu-like symptoms
- fever
- sore throat
- acute bronchitis (inflammation of the airways of the lungs, sometimes called a "chest cold")
- pneumonia (infection of the lungs)
- pink eye (conjunctivitis)
- acute gastroenteritis (inflammation of the stomach or intestines causing diarrhea, vomiting, nausea, and stomach pain)

Gastrointestinal symptoms are most commonly caused by types 40 and 41



Norovirus

Overview Norovirus

Norovirus is a viral illness that is the most common cause of acute gastroenteritis globally.

Emerging evidence suggest that norovirus infection is associated with intestinal inflammation, malnutrition and may cause long-term morbidity.

An estimated 685 million cases of norovirus are seen annually, including 200 million cases amongst children under 5.

The burden of norovirus is significant; norovirus causes an estimated 200,000 deaths per year, including 50,000 child deaths, primarily impacting low-income countries.



Rotavirus

Overview Rotavirus

Rotaviruses are the leading cause of severe, dehydrating diarrhea in children aged less than 5 years globally, with an estimated more than 25 million outpatient visits and more than 2 million hospitalizations attributable to rotavirus infections each year.

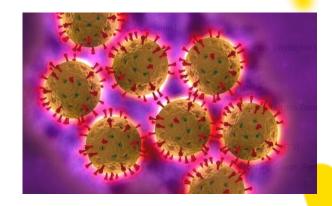
In developing countries, three-quarters of children acquire their first episode of rotavirus diarrhea before the age of 12 months, whereas in developing countries the first episode is frequently delayed until the age of 2-5 years.

Severe rotavirus gastroenteritis is largely limited to children aged 6-24 months.

Rotaviruses are shed in very high concentrations and for many days in the stools and vomitus of infected individuals.

Transmission occurs primarily by the faecal-oral route, directly from person to person or indirectly via contaminated fomites.

The universal occurrence of rotavirus infections shows that clean water supplies and good hygiene are unlikely to have a substantial effect on virus transmission.





Common symptoms

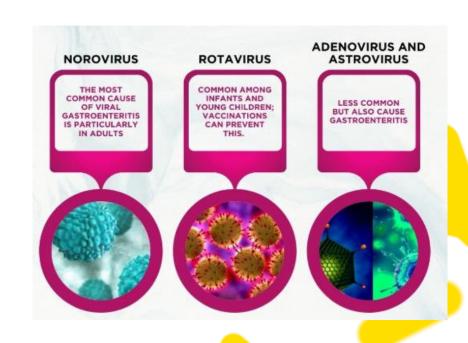
All three infections share many symptoms such as watery diarrhea, nausea, vomiting, abdominal cramps, and sometimes fever.

That can make it challenging to differentiate between the three based solely on symptoms.

A combined test helps **quickly differentiate the causative agent** when symptoms alone aren't enough

Those viruses are leading causes of acute gastroenteritis especially in:

- •Infants and young children
- Elderly
- Immunocompromised individual



Why use rapid tests?

Quick Diagnosis and immediate action: It provides fast results, allowing for quicker treatment decisions. Rapid detection helps prevent outbreaks, avoid unnecessary antibiotics and focuses care on hydration and isolation.

Immediate Clinical Decision-Making

Prompt isolation of the patient / Enhanced disinfection procedures/ Reduced transmission in healthcare and group settings

Cost-Effective: Compared to more sophisticated tests, they don't require extensive lab resources, reducing costs for both healthcare providers and patients.

Supports Public Health Response

- •Rapid tests help detect outbreaks early, enabling public health officials to:
 - Trace sources (e.g., contaminated food or water)
 - Prevent further spread

Why use COMBO rapid tests?

Dosing (combining detection) adenovirus, rotavirus, and norovirus in rapid tests improves clinical speed, diagnostic accuracy, infection control, and cost-effectiveness by detecting common causes of viral gastroenteritis in a single test.

Distinguishing Between Similar Symptoms: A combo rapid test helps quickly identify which virus is causing the illness, enabling accurate diagnosis and appropriate treatment.

Increased Diagnostic Efficiency: Instead of having to perform separate tests, a combo test provides results for individual viruses in one go. This saves time and effort, especially in busy healthcare settings, and ensures a quicker diagnosis.

Better Management of Health Resources: Rapid diagnosis through combo testing helps healthcare facilities manage their resources more effectively. With quick results, hospitals and clinics can prioritize care based on the specific illness and minimize cross-contamination between patients.



Article code	Adenovirus #RAPAD602	Norovirus #RAPAO602	Rotavirus #RAPARO602
Reading	Visual interpretation	Visual interpretation	Visual interpretation
Detection type	Qualitative detection of Adenovirus in human fecal specimens	Qualitative detection of Norovirus in human fecal specimens	Qualitative detection of Rotavirus in human fecal specimens
Regulatory status	CE-IVD	CE-IVD	CE-IVD
Specimen type	Feces	Feces	Feces
Reading time	10 min	15 min	10 min
Number of Tests per kit	25 Tests	10 Tests	25 Tests
Storage temperature	2-30°C	2-30°C	2-30°C
Shipping temperature	Ambiant temperature	Ambiant temperature	Ambiant temperature
Sensitivity	95,2%	95,7%	97,3%
Specificity	97,7%	91,7%	97,1%

Article code	Combo Rotavirus/Adenovirus #RAPAAC625	Combo Rota/Adeno/Noro #RAPAA635
Reading	Visual interpretation **	Visual interpretation*
Detection type	Qualitative detection of rotavirus and adenovirus in human feces	Qualitative detection of norovirus, rotavirus and adenovirus
Regulatory status	CE-IVD	CE-IVD
Specimen type	Feces	Feces
Reading time	10 min	15 min
Number of Tests per kit	25 Tests	10 Tests
Storage temperature	2-30°C	2-30°C
Shipping temperature	Ambiant temperature	Ambiant temperature
Sensitivity	97.3% (rotavirus) / 95.2% (adenovirus)	>99.9% (norovirus) / 97.3% (rotavirus) / 95.2% (adenovirus)
Specificity	97.1% (rotavirus) / 97.7% (adenovirus)	98.1% (norovirus) / 97.1% (rotavirus) / 97.7% (adenovirus)

*Those COMBO tests are also available in a format compatible with our automatic Rapid test Reader Contact us for more information

