



## ATLAS ROTA-VIRUS LATEX TEST KIT

Rota-virus has been shown to be a principle causative agent of gastro-enteritis. Patients may harbour up to 10 to the 8 virus particles per gram of faeces. During the winter months rota-viral disease may occur in epidemic proportions, especially in neonates. ATLAS test reagent is composed of antibody sensitized latex particles allowing detection of antigen by slide agglutination.

### KIT COMPONENTS

1. Latex test reagent.
2. Latex control reagent.
3. Positive bovine rota-virus control, inactivated.
4. 5 x Concentrate extraction buffer. P.H.7.2.
5. Pipette/Stirrers/Agglutination slides.

### ADDITIONAL REQUIREMENTS.

Pipettes (50µl).  
Small glass or plastic tubes.  
Vortex mixer.  
Centrifuge.

### STORAGE.

The reagents must be stored upright, well closed at 2-8°C.

### TEST REAGENTS.

All the reagents must be allowed to reach room temperature before use. Do not freeze any of the reagents. The latex reagent should be well shaken to ensure homogeneity.

### QUALITATIVE METHOD.

1. Allow each component to reach room temperature.
2. To 10 ml of extraction buffer, dilute with 40 mls of de-ionised water. This will give enough extraction buffer for 25 sample preparations.
3. To a 2 ml aliquot of extraction buffer add 0.2 gms of faecal specimen.
4. Mix well on a vortex mixer, until solids are evenly dispersed.
5. Stand at room temperature for 10 mins.
6. Centrifuge test sample for 10 minutes at about 800g.
7. Place one drop of the supernatant from the faecal sample onto the circle of test slide.
8. Repeat step 7 using circle 2 of the test slide.
9. Add one drop of the **control** latex reagent next to the drop of faecal sample on circle 1.
10. Add one drop of the **test** latex reagent next to the drop of faecal sample circle 2.
11. Using the other end of the disposable pipette (broad end), spread the control latex reagent over the entire area of the test circle.
12. Repeat step 11 using the test latex on circle 2.
13. Gently tilt the test slide backwards and forwards approximately once every two seconds for two minutes. The positive control is ready to use and should not be diluted. Normal laboratory precautions should be maintained whilst handling patients samples.

### RESULTS

A **positive** result is indicated by the visible aggregation of the latex particles.

A **negative** result is indicated by a milky appearance without a visible aggregation of the latex particles.

The reading is equivocal if agglutination occurs with both reagents. In this case repeat the test on a fresh specimen diluting the supernatant 1:2 in buffer P.H.7.2.

### SAFETY PRECAUTIONS

The Reagents contain less than 0.1% sodium azide as a preservative. Avoid ingestion and contact with skin or mucus membrane. Normal laboratory precautions should be maintained while handling test reagents.

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