



## ATLAS E.COLI LATEX TEST KIT

### Latex agglutination test for the rapid identification of E. coli Serogroup 0157.

For *In-Vitro* and professional use only

Store at 2°-8°C

The test is best used in conjunction with Sorbitol MacConkey Agar. E Coli 0157 strains cannot ferment sorbitol and will therefore give colorless colonies. The majority of other E Coli strains are capable of fermenting Sorbitol and therefore give characteristic pink colonies. Sorbitol MacConkey Agar can therefore be used as a primary screening method, and only non-sorbitol fermenting (NSF) colonies tested by the latex agglutination method.

#### KIT COMPONENTS

1. Latex Test Reagent: consists of latex particles sensitized with specific antibody to 0157 antigen.
2. Latex Control Reagent: consists of latex particles sensitized with normal serum.
3. Positive Control: suspension of inactivated E. Coli 0157 cells in buffer.
4. Negative Control: suspension of inactivated non-specific E.Coli cells in buffer.
5. Reaction Slides.
6. 50ul Dropper.
7. Mixing sticks.

#### ADDITIONAL REQUIREMENTS

Sorbitol MacConkey Agar Plates.  
0.85% Saline.

Microbiological loop with Bunsen burner.  
Disinfectant – Sodium Hypochlorite.

#### STORAGE

The reagents are stable until the expiration date as shown on the label.

Reagents should be stored upright at 2-8C. DO NOT FREEZE.

Reagents should be allowed to reach room temperature prior to use.

#### SAMPLE PREPARATION

Non-Sorbitol fermenting colonies may be taken directly from the plate or NSF isolates may be sub cultured onto non-selective media (Nutrient Agar) for testing. At least 10 different NSF colonies should be tested, to ensure any mixed strains or contaminants are not detected. Use of control latex will ensure that the tested colony does not auto agglutinate.

#### METHOD

1. Using a provided pipette, place one drop of saline onto two separate circles of a reaction slide.
2. Using a sterile loop, pick off colonies of the organism to be investigated emulsify in the drop of saline in one of the circles on the slide. Repeat with the second drop.
3. Add one drop of Test Latex reagent to one of the drops of saline and one drop of Control Latex reagent to the other.
4. Using the loop, mix the test reagent and Control Reagent.
5. Rotate the slide for one minute and observe for agglutination.
6. Dispose of all contaminated material to disinfectant.

#### INTERPRETATION OF RESULTS

A positive result is indicated by agglutination with the test reagent, whilst the control reagent should appear milky and smooth.

If broth reagents agglutinate, then the test should be repeated. If stringiness appears the organism should be emulsified in a 0.4ml of saline in a small test tube and tested by using one drop of the resulting suspension on a reaction slide and adding one drop of Test Reagent.

Repeat using the control reagent as above.

#### LIMITATIONS OF USE

If a positive result is obtained on an unknown organism further biochemical tests should be carried out to confirm that the organism is an E. Coli strain.

A positive identification of E. Coli strain by either Latex or Sorbitol MacConkey Agar Methods does not directly indicate that the isolate is a toxin producing strain.

ATLAS Medical  
William James House,  
Cowley Road, Cambridge, CB4 4WX, UK

**Tel: ++44 (0) 1223 858 910**  
**Fax: ++44 (0) 1223 858 524**

PP1107A01  
Revision B (20.07.2004)