

E. COLI O157

LATEX TEST



STATENS
SERUM
INSTITUT

*prevents and controls
infectious diseases,
biological threats and
congenital disorders*

- *Identification of E. coli O157*
- *Simple and fast*
- *Result within 10 seconds*



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Description

The *E. coli* O157 Latex Test is a fast and simple slide agglutination test for identification of *E. coli* O157 antigens. The test is based on latex particles sensitized with highly specific polyclonal O157 antiserum. The antiserum was raised in rabbits and preserved with 0.0975% sodium azide. The latex reagent is delivered in a 1.5 ml vial sufficient for approximately 75 tests.

Background

E. coli serotype O157:H7 is a verotoxin (VT) producing pathogen which is associated with Hemorrhagic Colitis and Haemolytic Uremic Syndrome in children. *E. coli* serotypes other than O157:H7 also produce VT, however the diarrhoea is usually non-bloody. This *E. coli* bacteria naturally occur in the intestines of healthy cattle. Outbreaks can be caused by eating undercooked ground beef or by drinking unpasteurized milk. Identification of the verotoxin producing pathogen provides important information for the optimal treatment of the patient.

Procedure

The clinical specimen is grown overnight on a Sorbitol MacConkey agar plate or any other *E. coli* selective agar plate. The colonies are suspended in 0.9% NaCl and mixed with the *E. coli* latex reagent.

The latex agglutination test is performed as follows:

1. One droplet (10 µl) of bacterial suspension is placed on a plastic or glass slide.
2. One droplet (10 µl) of latex suspension is placed on the slide beside the bacterial drop.
3. The two suspensions are mixed and the slide is rocked for 5-10 seconds.

A positive reaction is indicated by an agglutination appearing within 5 to 10 seconds. If the reaction time exceeds 20 seconds, false positive reactions may occur. In case of a positive agglutination the presence of H7 should be confirmed by serotyping with monospecific H7 antiserum.

Limitations

The *E. coli* Latex Test is intended to be used on pure cultures of *E. coli* grown on a Sorbitol MacConkey agar plate or another *E. coli* selective agar plate. Sorbitol MacConkey agar medium is recommended to be used as the primary screening step for detection of the O157:H7 serotype prior to use of the *E. coli* O157 Latex Test. Positive results are obtained with other *E. coli* O157 serotypes than O157:H7.

Storage and shelf life

The product should be kept in a dark place at 2-8°C. The expiry date is printed on the package.

Available products

Art. No. 73412 *E. coli* Latex O157, 75 test.

Ordering and Information

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