E. COLI O157 LATEX TEST

Latex particles coated with *E. coli* antiserum raised in rabbits

for *in vitro* diagnostic use

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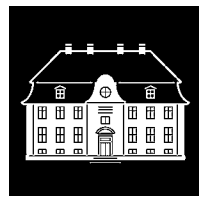

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Application
The *E. coli* O157 Latex Test is ready-to-use for identification of *E. coli* O157 antigens.

Background
E. coli serotype O157:H7 is a verotoxin (VT) producing pathogen which is associated with Hemorrhagic Colitis and Haemolytic Uremic Syndrome. *E. coli* serotypes other than O157:H7 also produce VT, however the diarrhoea is usually non-bloody. Additionally *E. coli* O157:H7 ferments sorbitol very slowly or not at all while the majority of other *E. coli* serotypes do ferment sorbitol. Therefore if sorbitol MacConkey agar medium is used as a primary screen sorbitol (-) colonies can be differentiated from sorbitol (+) colonies: Sorbitol (-) colonies appear as colourless and sorbitol (+) colonies appear as red-pink.

Description
The *E. coli* O157 Latex Test contains a bottle with purified *E. coli* O157 antiserum (raised in rabbits, 0.0975% sodium azide as preservation) coated with latex particles. Cross-reactions have been removed. One vial contains 1.5 mL reagent sufficient for approximately 75 tests.

Limitations
- The *E. coli* O157 Latex test is intended to be used on pure cultures of *E. coli* grown on Sorbitol MacConkey agar plates or other *E. coli* selective agar plates which show a typical *E. coli* morphology.
- Positive results are obtained with other *E. coli* O157 serotypes than O157:H7.

Materials required but not provided
- Sorbitol MacConkey agar plate or other *E. coli* selective agar plates
- 0.9% Sodium chloride (saline)
- Pipette or any other utility that can make a droplet of approximately 10 µL
- Mixing sticks
- Disposable reaction cards (200 psc., art. no. 53285)

Procedure
1) The specimen should be grown on a Sorbitol MacConkey agar plate or another *E. coli* selective agar plate and incubated over night.
2) Allow the latex reagent bottle to reach room temperature before use.
3) Do not perform more than 3 reactions simultaneously.
4) Select 5 colourless colonies from the Sorbitol MacConkey agar plate or 5 colonies from another *E. coli* selective agar plate and suspend in 0.2 mL saline.
5) Shake the latex reagent bottle and place 1 drop (approximately 10 µL, squeeze the bottle gently) of latex suspension in a circle on the reaction card.
6) Apply 1 drop (approximately 10 µL) of the bacterial suspension next to the drop of latex suspension.
7) Mix the two drops with a mixing stick and spread to cover the complete area of the circle. Use a separate stick for each reaction.
8) Rock the card slowly and observe for agglutination within 5-10 seconds. Any agglutination after 20 seconds will be considered as false positive.
9) Negative control is performed by mixing 1 drop of the latex reagent with 10 µL of saline.

If a positive agglutination reaction is achieved the presence of H7 should be confirmed by serotyping with monospecific H7 antiserum (ex. SSI: art. no. 54406).

Storage and shelf life
Store at 2-8°C in a dark place. Expiry date is printed on the package. Do not freeze (if the reagent have accidentally been frozen, it should not be used).

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