

# IMMULEX™ E. COLI LATEX ANTISERA

STATENS  
SERUM  
INSTITUT



- Identification of the most common EPEC strains
- Simple and fast
- Result within 10 seconds



## Description

The ImmuLex™ *E. coli* latex test for agglutination is a fast and simple slide agglutination test for identification of some of the most common EPEC (entero pathogenic *Escherichia coli*) strains. The test is based on latex particles sensitized with highly specific polyclonal antiserum. The antiserum were raised in rabbits and preserved with 0.0975% sodium azide. The latex reagents are delivered in 1.5 mL vials sufficient for approximately 75 tests.

## Background

The EPEC serotypes are the most pathogenic serotypes for humans. EPEC include verotoxin producing *E. coli* (VTEC) strains, which are associate associated with Hemorrhagic Colitis and Haemolytic Uremic Syndrome in children. Among EPEC strains O157:H7 are the most common, but other serotypes also produces VT, however the diarrhoea is usually non-bloody. These *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 an *E. coli* selective agar plate. A few colonies are recultivated on a non-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 10 seconds. If the reaction time exceeds 10 seconds, false positive reactions may occur. In case of a positive agglutination the presence of the H antigen (e.g. H7) should be confirmed by serotyping with monospecific H serum.

## Limitations

The ImmuLex™ *E. coli* latex antisera are for screening of live cultures from a non selective plate. False positive and false negative results might occur if bacteria from a selective media are used. Some selective media (e.g. SSI Enteric medium, art. no. 34121) do not influence the agglutinations. Physiological saline is used as a negative control and must be negative when mixed with the bacteria.

## Storage and shelf life

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

## Available products

Art. No.	Product	No. of tests	Packing
81663	ImmuLex™ <i>E. coli</i> O26	75 tests	1.5 mL vial
81670	ImmuLex™ <i>E. coli</i> O55	75 tests	1.5 mL vial
81668	ImmuLex™ <i>E. coli</i> O91	75 tests	1.5 mL vial
81664	ImmuLex™ <i>E. coli</i> O103	75 tests	1.5 mL vial
81665	ImmuLex™ <i>E. coli</i> O111	75 tests	1.5 mL vial
81667	ImmuLex™ <i>E. coli</i> O128	75 tests	1.5 mL vial
73412	ImmuLex™ <i>E. coli</i> O157	75 tests	1.5 mL vial

