Escherichia coli O111 concentrating reagents by immune magnetic beads

E. coli O111 IMS "SEIKEN"

This reagent consists of immune magnetic beads sensitized with a polyclonal antibody against *E. coli* O111. The reagent is used for concentrating *E. coli* O111 from culture medium as an aid in making isolation of *E. coli* O111 on selective agar medium more efficient.

[Features]

To concentrate *E. coli* O111 from growth culture efficiently with specific rabbit polyclonal antibody.

[Contents]

E. coli O111 IMS "SEIKEN" 1.3 mL × 1vial

The suspension of immune magnetic beads sensitized with rabbit polyclonal antibody against *E. coli* O111.

[Intend to use]

To concentrate E. coli O111 from food specimen.

[Procedures]

1. Instruments and reagents for the tests

Instruments for the tests, but not provided.

Pipette, 1.5mL micro-centrifuge tube

Instruments for the tests, separately provided.

Magnetic rack

Reagents: E. coli O111 IMS "SEIKEN"

Sterilized PBS buffer or saline (not provided)

2. Preparation of specimen

Homogenate culture (enrichment culture) is used as specimen.

- 2. Performance
- 1) Add 1mL of culture into a micro centrifuge tube.
- 2) Add one drop (25uL approximately) of *E. coli* O111 IMS into the tube.
- 3) Mix well and leave at the room temperature for 30 minutes, mixing at 10 minutes

intervals.

- 4) Place the tube for 5 minutes on magnetic rack to collect magnetic beads. Rotate the stand gently a few times to make the beads collect at the one point of the tube.
- 5) Carefully remove the supernatant with a micropipette. Avoid disturbing the magnetic beads.
- 6) Remove the tube from magnetic rack and add 1mL of sterile PBS buffer or sterile physiological saline, and resuspend the beads.
- 7) Wash the beads by repeating the steps 5) and 6) above.
- 8) Add 0.1mL of sterile PBS buffer or sterile physiological saline, and resuspend the beads.

[Notes for handling]

- 1. General precautions
- 1) After incubation for enrichment, large amounts of *E. coli* O111 are in the specimens. Take care of exposure and infection at the time of handling steps for concentration.

This reagent can concentrate *E. coli* O111 efficiently, but contaminating bacteria may stick to the inside of the tube. Use some isolation medium parallel after collecting and recovering step.

- 2) The sensitive detection of *E. coli* O111 depends on their ability to grow, whether the cells are stressed the extent to which other bacteria are present at the time of culturing.
- 2. Cautions in use and handling
- 1) Mix the magnetic beads reagent well to form a homogeneous suspension before use. When adding the magnetic bead reagent, hold the reagent vial in a vertical position.
- 2) Do not freeze the reagents as this may lead to poor reagent performance.
- 3) Allow the reagents to stand at room temperature for at least 30 minutes before use.
- 4) Do not mix or interchange reagents from different lots.
- 5) Use the reagent according to the concentration method only as indicated in this insert.
- 6) Do not use reagent vial for other purposes.
- 7) The reagent is not for intended for uses other than described in this insert.
- 3. Cautions for waste
- 1) This reagent contains 0.1 w/v % of sodium azide. Sodium azide may produce explosive heavy metal azides by reaction with lead or coppers. The reagent should be

disposed off with a large amount of water.

- 2) Materials and equipment used in this test should be sterilized by one of the following methods, and disposed of according to the waste-related laws.
- ① Soaking in 0.1% sodium hypochlorite solution (chloride content about 1000ppm) for more than 1 hour.
- ② Soaking by 2% glutalaldehyde solution (final content) for more than 1 hour.
- 3 Autoclaving them at 121°C for more than 20 minutes.

[Storage and expiration]

Store the reagent at $2 \sim 10^{\circ}$ C, up to expiration date on the label.

[Package]

E. coli O111 IMS "SEIKEN" 1.3mL × 1 vial (Product code: xxxxxx)

Also available!

E. coli O157-F 20 tests Code: 230614

E. coli O157 IMS 2.5 mL × 1 vial Code: 240071

Magnetic rack Code: 240088