

E. coli O111 O157 O26 - IMS "SEIKEN"

PRINCIPLE

Three separate immunomagnetic separation (IMS) reagents which use magnetic beads individually sensitized with a highly specific monoclonal (O157) or polyclonal (O111 and O26) antibodies to the O LPS antigen for concentrating *E. coli* O157, *E. coli* O111, and *E. coli* O26 before selective culture/plating, respectively.

FEATURES

Improves efficiency of isolation and sensitivity by 100-fold compared to direct plating.

PROCEDURES

Food sample

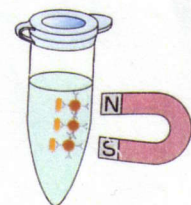
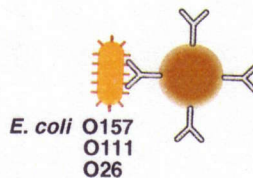
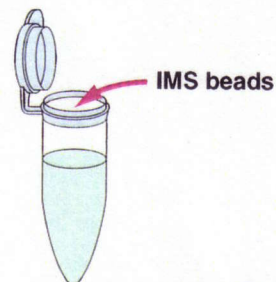
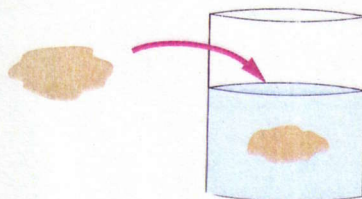


Enrichment culture



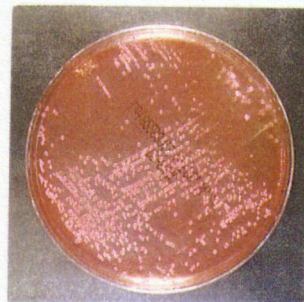
Concentration of *E. coli* O157 (procedure is the same for *E. coli* O111 and *E. coli* O26)

- ↓ 1. Pipette 1 ml of culture broth into a microcentrifuge tube.
- ↓ 2. Add one drop of *E. coli* O157-IMS "SEIKEN" (or *E. coli* O111-IMS "SEIKEN", etc.)
- ↓ 3. Mix well and let sit for 30 minutes, mixing occasionally.
- ↓ 4. Collect beads with magnetic rack.
- ↓ 5. Discard the supernatant.
- ↓ 6. Add 1 ml of sterile saline and mix well.
- ↓ 7. Repeat steps 4 - 5.
- ↓ 8. Add 0.1 ml of sterile saline and mix well.



Growth on TC-SMAC - Inoculate 50 uL of the above suspension onto TC-SMAC

Growth pattern on TC-SMAC (*E. coli* O157)



Direct plating



Concentration by
E. coli O157-IMS

Slide Latex (or antisera) agglutination of *E. coli* O157 (*E. coli* O111 or *E. coli* O26)