

Rapid Cell Capture and Fluorescent Detection Kit

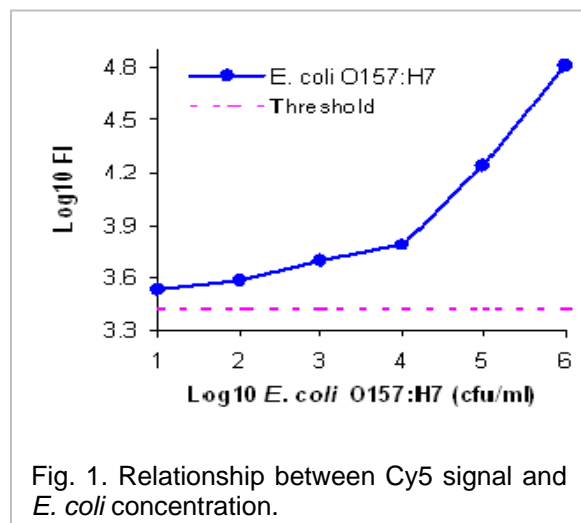
Cell type: *E. coli* O157:H7

Catalog No.:IMFA E1 Size: 20 assays

DESCRIPTION

The purpose of this kit is to rapidly capture and detect *E. coli* O157:H7 cells using an immunomagnetic fluorescence assay (IMFA). Developed by Creatv MicroTech, Inc., this rapid and sensitive assay is capable of isolating and quantifying as few as 10 cfu/ml.

IMFA is a technique in which magnetic beads rapidly separate *E. coli* O157:H7 cells from a sample while fluorescent tagged detector antibodies quantify the amount present. The following procedure will label and detect both viable and non-viable O157:H7 cells in a given solution of 1 ml, or less. Viable *E. coli* show no adverse or inhibitory effects when exposed to the reagents for short periods of time, however long term exposure to the elution reagent may damage cells. The known limit of detection is 10 cells per 1 ml reaction, but higher sensitivity is possible.



APPLICATION

This product is suited for use as a presumptive positive test to detect the presence of the O157:H7 antigenic marker in a solution of cells.

KIT CONTENTS

- Anti-O157 immunoaffinity magnetic beads
- DL649-conjugated anti-O157 detector antibody
- Wash buffer
- Dilution buffer
- Detection buffer
- Positive Control (Heat killed O157:H7)
- Negative Control

STORAGE AND STABILITY

Upon receipt, store the kit at 2-8 °C. Stable for a minimum of 6 months when properly stored.

PROTOCOL

- Incubate 1 ml sample with 3 µl anti-O157 magnetic beads for 1 hour at room temperature.
- Separate beads using a magnetic rack and wash.
- Incubate the beads in 100 µl 649-conjugated anti-O157 antibody for 30 minutes.
- Separate beads using a magnetic rack and wash.
- Add 100 µl detection buffer and read fluorescence signal with excitation wavelength 635 nm and emission wavelength 670 nm on Signalyte™-II.

PRODUCT SAFETY AND HANDLING

See MSDS (Material Safety Data Sheet) for this product.