



## E. coli O157 (1031): sc-57710

### BACKGROUND

*Escherichia coli* is a member of the family *Enterobacteriaceae* and it is one of the main species of bacteria living in the lower intestines of mammals. *E. coli* is a Gram-negative, rod-shaped, aerobic microbe that is commonly used as a model organism for bacteria in general. The K99 pilus antigen plays a large role in *E. coli* attachment and colonization in the small intestine. *E. coli* is the cause of a wide variety of infections in mammals, including urinary tract infections, meningitis, peritonitis, mastitis, septicemia and Gram-negative pneumonia. Because of the important role of *E. coli* in modern biological engineering, researchers commonly take advantage of this bacteria. *E. coli* can be easily altered to synthesize DNA or proteins, which can then be produced in large quantities using industrial fermentation processes.

### REFERENCES

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### SOURCE

*E. coli* O157 (1031) is a mouse monoclonal antibody raised against *E. coli*.

### PRODUCT

Each vial contains 100  $\mu$ g IgG<sub>3</sub> in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

### APPLICATIONS

*E. coli* O157 (1031) is recommended for detection of serotype O157 of *E. coli* origin by immunoprecipitation [1-2  $\mu$ g per 100-500  $\mu$ g of total protein (1 ml of cell lysate)] and immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500).

### RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 2) Immunofluorescence: use goat anti-mouse IgG-FITC: sc-2010 (dilution range: 1:100-1:400) or goat anti-mouse IgG-TR: sc-2781 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

### STORAGE

Store at 4° C, \*\*DO NOT FREEZE\*\*. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

### RESEARCH USE

For research use only, not for use in diagnostic procedures.

### PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) or our catalog for detailed protocols and support products.