

E. coli (1011): sc-57709

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. The *E. coli* strain O157 is one of hundreds of strains of the bacterium *E. coli* that causes illness in humans. O157 produces Shiga-like toxins that cause gastrointestinal illnesses. The *E. coli* K1 strain causes neonatal meningitis by penetrating into the central nervous system.

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RESEARCH USE

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

SOURCE

E. coli (1011) is a mouse monoclonal antibody raised against a mixture of *E. coli* serotypes O18, O44, O112 and O125.

PRODUCT

Each vial contains 100 μ g IgG₁ in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

E. coli (1011) is recommended for detection of a number of *E. coli* serotypes of *E. coli* origin by solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

STORAGE

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

PROTOCOLS

See our web site at www.scbt.com for detailed protocols and support products.