SANTA CRUZ BIOTECHNOLOGY, INC.

E. coli (402): sc-57713

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.

REFERENCES

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RESEARCH USE

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

SOURCE

E. coli (402) is a mouse monoclonal antibody raised against a pool of four *E. coli* serotypes which are associated with human urinary tract infections: O18:B21, O44:K74, O112:B11 and O125:B15.

PRODUCT

Each vial contains 100 µg IgG_1 in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

E. coli (402) is recommended for detection of *E. coli* by solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000); non cross-reactive with *Enterobacter aerogenes*, *Proteus vulgaris*, *Pseudomonas aeruginosa*, *Klebsiella pneumoniae*, *Serratia marcescens* and *Proteus mirabilis*.

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 or our catalog for detailed protocols and support products.