SANTA CRUZ BIOTECHNOLOGY, INC.

Salmonella flagella (6301): sc-69948

BACKGROUND

Salmonella bacteria are the most frequently reported cause of foodborne illness. *Salmonella* is a genus composed of rod-shaped, highly mobile Gram-negative bacterium. This non spore-forming genus includes more than 2,000 serotypes of *Salmonella* bacteria, organized into five different serogroups: *Salmonella* A, B, C, D and E. Several species are mildly pathogenic, producing slight gastroenteritis, while others generate a case of serious and often fatal food poisoning. Symptoms are reminiscent of the flu and may include myalgia, fever, lethargy, cough, gastrointestinal discomfort and sore throat. *Salmonella* flagella contain the *Salmonella* antigen H, an antigen that is known to potently induce TNFα and IL-1β. Antigen H and, therefore, *Salmonella* flagella play a dominant role in the activation of the host immune response. Antigen H can be highly variable among the various serotypes of *Salmonella*. When compared with other Gram-negative bacteria, *Salmonella* flagella exhibit the highest TNFα-inducing activity.

REFERENCES

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2. He, X.S., Rivkina, M., Stocker, B.A. and Robinson, W.S. 1994. Hypervariable region IV of *Salmonella* gene *fliC*^{d} encodes a dominant surface epitope and a stabilizing factor for functional flagella. J. Bacteriol. 176: 2406-2414.
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9. Khan, F.Y., Kamha, A.A. and Alomary, I.Y. 2006. Fulminant hepatic failure caused by *Salmonella paratyphi* A infection. World J. Gastroenterol. 12: 5253-5255.

RESEARCH USE

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

SOURCE

Salmonella flagella (6301) is a mouse monoclonal antibody raised against *Salmonella* flagella.

PRODUCT

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

APPLICATIONS

Salmonella flagella (6301) is recommended for detection of flagellum protein of *Salmonella* species including *gallinarum*, *tennessee*, *enteriditis*, *anatum*, *cubana*, *cook*, *paratyphi* A, *pullorum* and *westphalia* of *Salmonella* origin by solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

SELECT PRODUCT CITATIONS

1. Lee, E.B., Jeon, H.M., Kim, C.U., Park, S.M., Cho, G., Kim, H.J., Kim, Y., Kim, D.J., Kim, Y.S., Lee, H. and Lee, J.O. 2019. Attachment of flagellin enhances the immunostimulatory activity of a hemagglutinin-ferritin nanocage. Nanomedicine 17: 223-235.

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.