



Salmonella O (10D9H): sc-52221

BACKGROUND

Salmonella is a genus of rod-shaped gram-negative enterobacteria that causes typhoid fever, paratyphoid fever and foodborne illness. It is motile in nature and produces hydrogen sulfide as a by-product of its metabolism. *Salmonella* isolates are usually classified according to their serology. The main division of *Salmonella* is further classified by the somatic O antigen, the length of which is related to complement resistance. The O antigen is a surface polysaccharide made up of repeats of a short oligosaccharides. There are about 60 forms of O antigen in *Salmonella*, all of which were acquired by inter-specific gene transfer. The majority of gram-negative bacteria transfer their O antigen polysaccharides onto the lipid A-core oligosaccharide via the action of a surface polymer.

REFERENCES

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- Reeves, P. 1993. Evolution of *Salmonella* O antigen variation by interspecific gene transfer on a large scale. *Trends Genet.* 9: 17-22.
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- Murray, G.L., Attridge, S.R. and Morona, R. 2006. Altering the length of the lipopolysaccharide O antigen has an impact on the interaction of *Salmonella enterica* serovar *Typhimurium* with macrophages and complement. *J. Bacteriol.* 188: 2735-2739.

SOURCE

Salmonella O (10D9H) is a mouse monoclonal antibody raised against heat inactivated bacterial cells of *Salmonella enteritidis*, *paratyphi* and *typhimurium*.

PRODUCT

Each vial contains 100 µg IgG₁ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

Salmonella O (10D9H) is recommended for detection of *Salmonella enteritidis*, *paratyphi* and *typhimurium*, *anatum* and *selandia* of *Salmonella paratyphi*, *Salmonella typhimurium*, *Salmonella enteritidis*, *Salmonella anatum*, and *Salmonella selandia* origin by immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500).

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended:
1) Immunofluorescence: use m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

SELECT PRODUCT CITATIONS

- Suo, Z., Yang, X., Avci, R., Deliorman, M., Rugheimer, P., Pascual, D.W. and Idzerda, Y. 2009. Antibody selection for immobilizing living bacteria. *Anal. Chem.* 81: 7571-7578.

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 for detailed protocols and support products.