

Chlamydia LPS (1681): sc-58106

BACKGROUND

Chlamydia is caused by the bacterium *Chlamydia trachomatis*. The intracytoplasmic inclusions caused by the bacterium are draped around the infected nucleus of the cell. *Chlamydia trachomatis* is an intracellular organism that has a genome size of approximately 500-1000 kb and contains both RNA and DNA. It exists as 15 different serotypes which cause four major diseases in humans: endemic trachoma (caused by serotypes A and C), sexually transmitted disease and inclusion conjunctivitis (caused by serotypes D and K) and lymphogranuloma venereum (caused by serotypes L1, L2 and L3). Chlamydia usually infects the cervix and fallopian tubes of women and the urethra of men. It is one of the leading causes of blindness in underdeveloped countries. Lipopolysaccharide (LPS) is a major component of the cell membrane of *Brucella abortus*. LPS is an endotoxin that induces a strong response from normal animal immune systems and also contributes greatly to the structural integrity of the bacteria and protects its membrane from certain kinds of chemical attacks.

REFERENCES

1. Kim, S.K., Devine, L., Angevine, M., DeMars, R. and Kavathas, P.B. 2000. Direct detection and magnetic isolation of *Chlamydia trachomatis* major outer membrane protein-specific CD8⁺ CTLs with HLA class I tetramers. *J. Immunol.* 165: 7285-7292.
2. Bas, S., Genevay, S., Schenkel, M.C. and Vischer, T.L. 2002. Importance of species-specific antigens in the serodiagnosis of *Chlamydia trachomatis* reactive arthritis. *Rheumatology* 41: 1017-1020.
3. Clad, A., Petersen, E.E. and Dettlaff, S. 2004. Antibodies to *Chlamydia trachomatis* heat shock protein 60 (cHSP 60) and *Chlamydia trachomatis* major outer membrane protein (MOMP) in women with different tubal status. *Clin. Lab.* 49: 269-271.
4. Yen, T.Y., Pal, S. and de la Maza, L.M. 2005. Characterization of the disulfide bonds and free cysteine residues of the *Chlamydia trachomatis* mouse pneumonitis major outer membrane protein. *Biochemistry* 44: 6250-6256.
5. Deka, S., Vanover, J., Dessus-Babus, S., Whittimore, J., Howett, M.K., Wyrick, P.B. and Schoborg, R.V. 2005. *Chlamydia trachomatis* enters a viable but non-cultivable (persistent) state within herpes simplex virus type 2 (HSV-2) co-infected host cells. *Cell. Microbiol.* 8: 149-162.
6. Jalal, H., Stephen, H., Curran, M.D., Burton, J., Bradley, M. and Carne, C. 2006. Development and validation of a rotor-gene real-time PCR assay for detection, identification and quantification of *Chlamydia trachomatis* in a single reaction. *J. Clin. Microbiol.* 44: 206-213.

SOURCE

Chlamydia LPS (1681) is a mouse monoclonal antibody .

PRODUCT

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

APPLICATIONS

Chlamydia LPS (1681) is recommended for detection of *C. pneumoniae* and *C. psittaci* of *Chlamydia sp.* origin by immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500).

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.