C. pneumoniae (165): sc-57665



The Power to Question

BACKGROUND

Chlamydia pneumoniae (also known as Chlamydophila pneumoniae) is a species of Chlamydia bacteria that infects humans and is a major cause of pneumonia. The strain known as TWAR is responsible for approximately 10% of pneumonia cases and 5% of bronchitis cases in the United States. The intracytoplasmic inclusions caused by the C. pneumoniae bacterium are draped around the infected nucleus of the cell. C. pneumoniae must infect another cell in order to reproduce and is thus is classified as an obligate intracellular pathogen. The microbe is small, measuring 0.5 micrometers in diameter, and it undergoes several transformations during its life cycle. It exists as an elementary body in between hosts, in which state it is able to infect new hosts but cannot replicate; and as a reticulate body inside the host, in which state it replicates but is not able to cause new infection. In addition to its role in pneumonia, there is evidence associating C. pneumoniae with atherosclerosis and with asthma.

REFERENCES

- Aral, M., Guven, M.A. and Kocturk, S.A. 2005. Chlamydia pneumoniae seropositivity in women with pre-eclampsia. Int. J. Gynaecol. Obstet. 92: 77-78.
- Törmäkangas, L., Erkkilä, L., Korhonen, T., Tiirola, T., Bloigu, A., Saikku, P. and Leinonen, M. 2005. Effects of repeated *Chlamydia pneumoniae* inoculations on and inflammatory response in C57BL/6J mice. Infect. Immun. 73: 6458-6466.
- Blasi, F., Tarsia, P., Aliberti, S., Cosentini, R. and Allegra, L. 2006. *Chlamydia pneumoniae* and mycoplasma pneumoniae. Semin. Respir. Crit. Care. Med. 26: 617-624.
- Dreses-Werringloer, U., Gerard, H.C., Whittum-Hudson, J.A. and Hudson, A.P. 2006. *Chlamydophila (Chlamydia) pneumoniae* infection of human astrocytes and microglia in culture displays an active, rather than a persistent, phenotype. Am. J. Med. Scie. 332: 168-174.
- Iyoda, M., Hato, T., Matsumoto, K., Ito, J., Ajiro, Y., Kuroki, A., Shibata, T., Kitazawa, K. and Sugisaki, T. 2006. Rapidly progressive glomerulonephritis in a patient with *Chlamydia pneumoniae* infection: a possibility of superantigenic mechanism of its pathogenesis. Clin. Nephrol. 65: 48-52.
- Halfon, P., Limal, N., Penaranda, G., Khiri, H., Sene, D., Andreu, M., Feryn, J.M., Rotily, M., Serra, R., Piette, J.C. and Cacoub, P. 2006. Chronic *Chlamydia pneumoniae* infection in patients with symptomatic atherothrombosis. J. Infect. 53: 93-97.
- Mussa, F.F., Chai, H., Wang, X., Yao, Q., Lumsden, A.B. and Chen, C. 2006. Chlamydia pneumoniae and vascular disease: an update. J. Vasc. Surg. 43: 1301-1307.
- 8. Kaperonis, EA., Liapis, C.D., Kakisis, J.D., Perrea, D., Kostakis, A.G. and Karayannakos, P.E. 2006. The association of carotid plaque inflammation and *Chlamydia pneumoniae* with cerebrovascular symptomatology. J. Vasc. Surg. 44: 1198-1204.

RESEARCH USE

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

SOURCE

C. pneumoniae (165) is a mouse monoclonal antibody raised against a tissue culture enriched suspension of *C. pneumoniae* whole organism.

PRODUCT

Each vial contains 100 $\mu g \; lg G_{2a}$ in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

C. pneumoniae (165) is recommended for detection of the TWAR strain of *C. pneumoniae* origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000) and 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.

PROTOCOLS

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

Santa Cruz Biotechnology, Inc. 1.800.457.3801 831.457.3801 Fax 831.457.3801 Europe +00800 4573 8000 49 6221 4503 0 www.scbt.com