

C. pneumoniae (1695): sc-57667

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 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

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RESEARCH USE

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

SOURCE

C. pneumoniae (1695) is a mouse monoclonal antibody raised against a *C. pneumoniae* cell preparation.

PRODUCT

Each vial contains 100 µg IgG_{2a} in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

C. pneumoniae (1695) is recommended for detection of *C. pneumoniae* (TWAR) 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).

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-mouse IgG-HRP: sc-2005 (dilution range: 1:2000-1:32,000) or Cruz Marker™ compatible goat anti-mouse IgG-HRP: sc-2031 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunofluorescence: use goat anti-mouse IgG-FITC: sc-2010 (dilution range: 1:100-1:400) or goat anti-mouse IgG-TR: sc-2781 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

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.