



Pneumocystis jiroveci [carinii] (4i255): sc-71915

BACKGROUND

Pneumocystis is a genus of fungi which can be pathogenic in mammals. *Pneumocystis carinii*, also referred to as *Pneumocystis jiroveci*, is a microscopic fungus that exists in the lungs of many humans. This fungus is normally benign, but it can cause *Pneumocystis carinii* pneumonia (PCP) in immunocompromised individuals. During PCP, *Pneumocystis carinii* deteriorates the basement membrane of the lung, causing a rise in LDH levels and compromising gas exchange. Oxygen is less able to diffuse into the blood, leading to hypoxia, which, along with high arterial CO₂ levels, stimulates ventilation, thereby causing dyspnea. The fungus can also invade other visceral organs, such as the liver, spleen and kidney. Symptoms of *Pneumocystis carinii* infection include shortness of breath, non-productive cough, low grade fever, weight loss and night sweats. This disease can be fatal if not treated aggressively.

REFERENCES

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6. Schwietert, M. 1999. Dyspnea, fever in immunodeficiency. *Pneumocystis carinii* pneumonia. *Praxis* 88: 340-341.
7. Takahashi, T., Goto, M., Endo, T., Nakamura, T., Yusa, N., Sato, N. and Iwamoto, A. 2002. *Pneumocystis carinii* carriage in immunocompromised patients with and without human immunodeficiency virus infection. *J. Med. Microbiol.* 51: 611-614.
8. Stringer, J.R., Beard, C.B., Miller, R.F. and Wakefield, A.E. 2002. A new name (*Pneumocystis jiroveci*) for *Pneumocystis* from humans. *Emerg. Infect. Dis.* 8: 891-896.
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SOURCE

Pneumocystis jiroveci [carinii] (4i255) is a mouse monoclonal antibody raised against *Pneumocystis jiroveci* (carinii) isolated from human lung.

PRODUCT

Each vial contains 200 µg IgM kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

Pneumocystis jiroveci [carinii] (4i255) is recommended for detection of a 82 kDa polypeptide specific to *Pneumocystis jiroveci* (carinii) by immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500); non cross-reactive with *G. lamblia*, *T. gondii*, *T. cruzi*, *L. tropica*, *E. histolytica*, *C. albicans* and *P. falciparum*.

Molecular Weight of *Pneumocystis jiroveci* (carinii): 82 kDa.

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. 2) Immunohistochemistry: use m-IgGκ BP-HRP: sc-516102 with DAB, 50X: sc-24982 and Immunohistomount: sc-45086, or Organo/Limonene Mount: sc-45087.

SELECT PRODUCT CITATIONS

1. Moroki, T., Matsuo, S., Hatakeyama, H., Hayashi, S., Matsumoto, I., Suzuki, S., Kotera, T., Kumagai, K. and Ozaki, K. 2021. Databases for technical aspects of immunohistochemistry: 2021 update. *J. Toxicol. Pathol.* 34: 161-180.

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.