



# Pneumocystis jiroveci [carinii] (3F6): sc-57980

## 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 CO<sub>2</sub> 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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## SOURCE

Pneumocystis jiroveci [carinii] (3F6) 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] (3F6) 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.

## 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](http://www.scbt.com) for detailed protocols and support products.