**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**


**SOURCE**

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

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**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* (4i255) is recommended for detection of an 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:

**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 website at www.scbt.com for detailed protocols and support products.