

## Monoclonal Antibody to Chlamydia trachomatis (MOMP) - FITC

**Catalog No.:** BM5554F

**Quantity:** 1 ml

**Background:**

Chlamydia is caused by the bacterium *Chlamydia trachomatis*. The intracytoplasmic inclusions caused by the bacterium are draped around the infected cell's nucleus. *Chlamydia trachomatis* is an intracellular organism that has a genome size of approximately 500-1000 kilobases and contains both RNA and DNA. The organism is also extremely temperature sensitive and must be refrigerated at 4°C as soon as a sample is obtained. Colonization of *Chlamydia* begins with attachment to sialic acid receptors on the eye, throat or genitalia. It persists at body sites that are inaccessible to phagocytes, T cells, and B cells. It also exists as 15 different serotypes. These serotypes cause four major diseases in humans: endemic trachoma (caused by serotypes A and C), sexually transmitted disease and inclusion conjunctivitis (caused by serotypes D and K), and lymphogranuloma venereum (caused by serotypes L1, L2, and L3). Studies reveal that *Chlamydia*, because of its cell wall, is able to inhibit phagolysosome fusion in phagocytes. The cell wall is proposed to be Gram negative in that it contains an outer lipopolysaccharide membrane, but it lacks peptidoglycan in its cell wall. This lack of peptidoglycan is shown by the inability to detect muramic acid and antibodies directed against it. It may, however, contain a carboxylated sugar other than muramic acid. The proposed structure consists of a major outer membrane protein cross linked with disulfide bonds. It also contains cysteine rich proteins (CRP) that may be the functional equivalent to peptidoglycan. This unique structure allows for intracellular division and extracellular survival (Hatch 1996).

*Chlamydia* usually infects the cervix and fallopian tubes of women and the urethra of men. Chlamydial infections are believed to be one of the most common of all STDs. It is generally thought that in a population of 15 million, there are up to 300,000 cases of chlamydia each year. Thus, there are many undiagnosed cases of chlamydia in the community. It has been estimated that the true prevalence of chlamydia in the sexually active population may be in the order of 5% to 10%. *Chlamydia* is one of the leading causes of blindness in underdeveloped countries.

**Host / Isotype:** Mouse / IgG1

**Clone:** ICK

**Immunogen:** Chlamydia antigen

**For research and in vitro use only. Not for diagnostic or therapeutic work.**

Material Safety Datasheets are available at [www.acris-antibodies.com](http://www.acris-antibodies.com) or on request.

Antibody Hotline - Technical Questions - Antibody Location Service  
Free Call: 0800-2274746 (Germany only) - [www.acris-antibodies.com](http://www.acris-antibodies.com)

- Format:** **State:** Liquid Ready-to-use solution  
**Purification:** Protein A affinity chromatography  
**Buffer System:** Contains protein stabilizer, Evans Blue as counterstain and 0.09% NaN<sub>3</sub> as preservative  
**Label:** FITC
- Applications:** Immunofluorescence.  
Immunohistochemistry on frozen sections.  
Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.
- Specificity:** Mab ICK recognizes a species-specific epitope on the 40 kD major outer membrane protein of *C. trachomatis* with a strong fluorescence of elementary bodies (Ebs), reticulate bodies (Rbs) and with cytoplasmic inclusions of Bcomplex serotypes. C-complex serotypes show a weak reaction.
- Storage:** Store the antibody undiluted at 2-8°C.  
DO NOT FREEZE!  
Shelf life: one year from despatch.
- General References:** 1. Näher H, Petzoldt D, Sethi KK. Evaluation of non-radioactive in situ hybridisation method to detect *Chlamydia trachomatis* in cell culture. In: Genitourin Med 64:162-164 (1988)

---

**For research and in vitro use only. Not for diagnostic or therapeutic work.**

Material Safety Datasheets are available at [www.acris-antibodies.com](http://www.acris-antibodies.com) or on request.

Antibody Hotline - Technical Questions - Antibody Location Service  
Free Call: 0800-2274746 (Germany only) - [www.acris-antibodies.com](http://www.acris-antibodies.com)