

Product datasheet for BM5554F

OriGene Technologies, Inc.

9620 Medical Center Drive, Ste 200 Rockville, MD 20850, US Phone: +1-888-267-4436 https://www.origene.com techsupport@origene.com EU: info-de@origene.com CN: techsupport@origene.cn

Chlamydia trachomatis (MOMP) Mouse Monoclonal Antibody [Clone ID: ICK]

Product data:

Product Type: Primary Antibodies

Clone Name: ICK

Applications: IF, IHC

Recommended Dilution: Immunofluorescence.

Immunohistochemistry on frozen sections.

Host: Mouse

Isotype: lgG1

Clonality: Monoclonal

Immunogen: Chlamydia antigen

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.

Formulation: Contains protein stabilizer, Evans Blue as counterstain and 0.09% NaN3 as preservative

Label: FITC

State: Liquid Ready-to-use solution

Purification: Protein A affinity chromatography

Conjugation: FITC

Storage: Store the antibody undiluted at 2-8°C.

DO NOT FREEZE!

Stability: Shelf life: one year from despatch.





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.