



# MOMP (bC-15): sc-17376

## BACKGROUND

Chlamydia are obligate intracellular eubacteria. *C. trachomatis* and *C. pneumoniae* are both pathogens of humans but differ in their tissue tropism and spectrum of diseases. *C. pneumoniae* is a natural pathogen of humans, and causes pneumonia and bronchitis. *C. pneumoniae* infection is associated with atherosclerosis, while *C. trachomatis* infection causes sexually transmitted diseases and trachoma, an ocular infection that leads to blindness. The OMP1 gene encodes a major outer membrane protein (MOMP). The pre-mRNA contains a 22-amino acid leader sequence, which is cleaved during translocation to the outer membrane to yield a processed 40 kDa protein. Both *C. trachomatis* MOMP and *C. pneumoniae* MOMP contain seven conserved cysteine residues, which are involved in the formation of disulfide cross-linkages. *C. pneumoniae* regulates the expression of 92 kDa gelatinase by macrophages at the pretranslational level. MOMP is found to participate in the induction of the 92 kDa gelatinase to actively participate in the destruction of the extracellular matrix. IgA antibodies to MOMP in follicular fluid are associated with a failure to become pregnant after embryo transfer that is also correlated with human HSP 60 expression in follicular fluid. This suggests that a persistent upper genital tract chlamydial infection contributes to *in vitro* fertilization failure in some cases.

## REFERENCES

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## RESEARCH USE

For research use only, not for use in diagnostic procedures.

## SOURCE

MOMP (bC-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of MOMP of *C. pneumoniae* origin.

## PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-17376 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

MOMP (bC-15) is recommended for detection of MOMP of *C. pneumoniae* origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

## RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048.

## STORAGE

Store at 4° C, \*\*DO NOT FREEZE\*\*. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) or our catalog for detailed protocols and support products.