

## Datasheet

### CD46 monoclonal antibody, clone MEM-258 (PE)

**Catalog Number:** MAB4442

**Regulatory Status:** For research use only (RUO)

**Product Description:** Mouse monoclonal antibody raised against native CD46.

**Clone Name:** MEM-258

**Immunogen:** Native purified CD46 from human T cell line HPB-ALL.

**Host:** Mouse

**Theoretical MW (kDa):** 56-66

**Reactivity:** Bovine, Human

**Applications:** Flow Cyt, IP, WB  
(See our web site product page for detailed applications information)

**Protocols:** See our web site at <http://www.abnova.com/support/protocols.asp> or product page for detailed protocols

**Specificity:** This antibody recognizes an epitope on SCR4 (the membrane-proximal SCR) domain of CD46 (Membrane cofactor protein). CD46 is 56-66 kDa dimeric transmembrane protein expressed on T and B lymphocytes, platelets, monocytes, granulocytes, endothelial cells, epithelial cells and fibroblast; it is negative on erythrocytes.

**Form:** Liquid

**Conjugation:** PE

**Isotype:** IgG1

**Recommend Usage:** Flow Cytometry (20 ul in human blood cells 100 ul in whole blood or 10<sup>6</sup> cells in a suspension)

The optimal working dilution should be determined by the end user.

**Storage Buffer:** In PBS (0.2% BSA, 0.09% sodium

azide)

**Storage Instruction:** Store in the dark at 4 °C. Do not freeze.

Avoid prolonged exposure to light.

Aliquot to avoid repeated freezing and thawing.

**Entrez GeneID:** 4179

**Gene Symbol:** CD46

**Gene Alias:** MCP, MGC26544, MIC10, TLX, TRA2.10

**Gene Summary:** The protein encoded by this gene is a type I membrane protein and is a regulatory part of the complement system. The encoded protein has cofactor activity for inactivation of complement components C3b and C4b by serum factor I, which protects the host cell from damage by complement. In addition, the encoded protein can act as a receptor for the Edmonston strain of measles virus, human herpesvirus-6, and type IV pili of pathogenic *Neisseria*. Finally, the protein encoded by this gene may be involved in the fusion of the spermatozoa with the oocyte during fertilization. This gene is found in a cluster on chromosome 1q32 with other genes encoding structural components of the complement system. At least fourteen different transcript variants encoding fourteen different isoforms have been found for this gene. [provided by RefSeq]

#### References:

1. Ligation of the cell surface receptor, CD46, alters T cell polarity and response to antigen presentation. Oliaro J, Pasam A, Waterhouse NJ, Browne KA, Ludford-Menting MJ, Trapani JA, Russell SM. *Proc Natl Acad Sci U S A*. 2006 Dec 5;103(49):18685-90. Epub 2006 Nov 20.
2. Emerging roles and new functions of CD46. Liszewski MK, Kemper C, Price JD, Atkinson JP. *Springer Semin Immunopathol*. 2005 Nov;27(3):345-58. Epub 2005 Nov 11.
3. CD46 is a cellular receptor for group B adenoviruses. Gaggar A, Shayakhmetov DM, Lieber A. *Nat Med*. 2003 Nov;9(11):1408-12. Epub 2003 Oct 19.