

## ARG53864 anti-CD46 antibody [MEM-258] (PE)

Package: 100 tests  
Store at: 4°C

### Summary

Product Description	PE-conjugated Mouse Monoclonal antibody [MEM-258] recognizes CD46
Tested Reactivity	Hu, Bov
Tested Application	FACS
Specificity	The clone MEM-258 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.
Host	Mouse
Clonality	Monoclonal
Clone	MEM-258
Isotype	IgG1
Target Name	CD46
Species	Human
Immunogen	HPB-ALL human T cell line
Conjugation	PE
Alternate Names	MIC10; TLX; CD antigen CD46; Trophoblast leukocyte common antigen; AHUS2; TRA2.10; Membrane cofactor protein; MCP

### Application Instructions

Application table	Application	Dilution
	FACS	20 µl / 10 <sup>6</sup> cells
Application Note	* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	

### Properties

Form	Liquid
Purification Note	The purified antibody is conjugated with R-Phycoerythrin (PE) under optimum conditions. The conjugate is purified by size-exclusion chromatography and adjusted for direct use. No reconstitution is necessary.
Buffer	PBS, 15 mM Sodium azide and 0.2% (w/v) high-grade protease free BSA
Preservative	15 mM Sodium azide
Stabilizer	0.2% (w/v) high-grade protease free BSA
Storage instruction	Aliquot and store in the dark at 2-8°C. Keep protected from prolonged exposure to light. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be

gently mixed before use.

Note

For laboratory research only, not for drug, diagnostic or other use.

## Bioinformation

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Database links

[GeneID: 280851 Bovine](#)

[GeneID: 4179 Human](#)

[Swiss-port # P15529 Human](#)

[Swiss-port # Q6VE48 Bovine](#)

Gene Symbol

CD46

Gene Full Name

CD46 molecule, complement regulatory protein

Background

CD46 (MCP, membrane cofactor protein) is a multifunctional cell surface transmembrane protein that binds and inactivates C3b and C4b complement fragments, regulates T cell-induced inflammatory responses by either inhibiting (CD46-1 isoform) or increasing (CD46-2 isoform) the contact hypersensitivity reaction. CD46 also serves as a receptor for several human pathogens (both bacteria and viruses), and its ligation alters T lymphocyte polarization toward antigen-presenting cells or target cells, inhibiting lymphocyte function. CD46 is a protector of placental tissue and is also expressed on the inner acrosomal membrane of spermatozoa.

Function

Acts as a cofactor for complement factor I, a serine protease which protects autologous cells against complement-mediated injury by cleaving C3b and C4b deposited on host tissue. May be involved in the fusion of the spermatozoa with the oocyte during fertilization. Also acts as a costimulatory factor for T-cells which induces the differentiation of CD4+ into T-regulatory 1 cells. T-regulatory 1 cells suppress immune responses by secreting interleukin-10, and therefore are thought to prevent autoimmunity. A number of viral and bacterial pathogens seem to exploit this property and directly induce an immunosuppressive phenotype in T-cells by binding to CD46. [UniProt]

Research Area

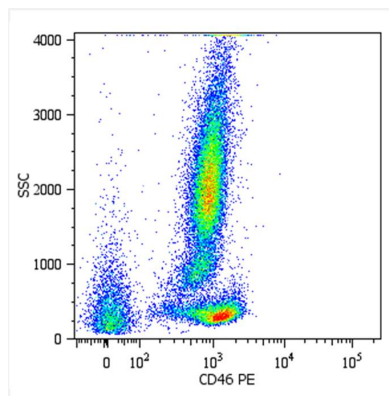
Immune System antibody

Calculated Mw

44 kDa

PTM

N-glycosylated on Asn-83; Asn-114 and Asn-273 in most tissues, but probably less N-glycosylated in testis. N-glycosylation on Asn-114 and Asn-273 is required for cytoprotective function. N-glycosylation on Asn-114 is required for Measles virus binding. N-glycosylation on Asn-273 is required for Neisseria binding. N-glycosylation is not required for human adenovirus binding. Extensively O-glycosylated in the Ser/Thr-rich domain. O-glycosylation is required for Neisseria binding but not for Measles virus or human adenovirus binding. In epithelial cells, isoforms B/D/F/H/J/L/3 are phosphorylated by YES1 in response to infection by Neisseria gonorrhoeae; which promotes infectivity. In T-cells, these isoforms may be phosphorylated by LCK.



ARG53864 anti-CD46 antibody [MEM-258] (PE) FACS image

Flow Cytometry: Human peripheral blood cells stained with ARG53864 anti-CD46 antibody [MEM-258] (PE).