

## ARG65495 anti-CD46 antibody [MEM-258] (azide free)

Package: 100 µg

Store at: -20°C

### Summary

Product Description	Azide free Mouse Monoclonal antibody [MEM-258] recognizes CD46
Tested Reactivity	Hu, Bov
Tested Application	FACS, IP, WB
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	Un-conjugated
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	1 µg/ml
	IP	Assay-dependent
	WB	Assay-dependent
Application Note	WB: Under non-reducing condition. * The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	

### Properties

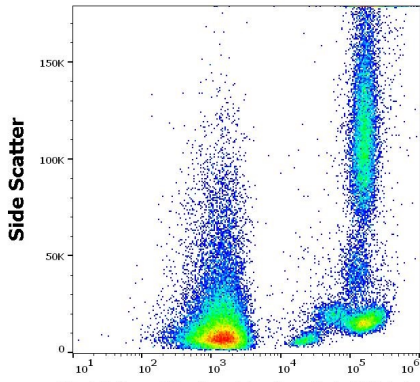
Form	Liquid
Purification	Purification with Protein A.
Purification Note	0.2 µm filter sterilized.
Purity	> 95% (by SDS-PAGE)
Buffer	PBS (pH 7.4)

Concentration	1 mg/ml
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C or below. Storage in frost free freezers is not recommended. 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

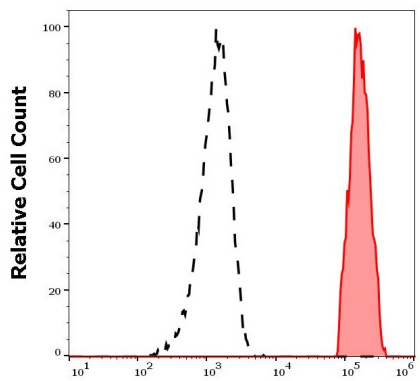
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Database links	<a href="#">GeneID: 280851 Bovine</a> <a href="#">GeneID: 4179 Human</a> <a href="#">Swiss-port # P15529 Human</a> <a href="#">Swiss-port # Q6VE48 Bovine</a>
Gene Symbol	CD46
Gene Full Name	CD46 molecule, complement regulatory protein
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.



ARG65495 anti-CD46 antibody [MEM-258] (azide free) FACS image

Flow Cytometry: Human peripheral blood cells stained with ARG65495 anti-CD46 antibody [MEM-258] (azide free) at 0.5  $\mu\text{g}/\text{ml}$  dilution, followed by APC-conjugated Goat anti-Mouse antibody.



ARG65495 anti-CD46 antibody [MEM-258] (azide free) FACS image

Flow Cytometry: Separation of human lymphocytes (red-filled) from erythrocytes (black-dashed). Human peripheral whole blood stained with ARG65495 anti-CD46 antibody [MEM-258] (azide free) at 0.5  $\mu\text{g}/\text{ml}$  dilution, followed by APC-conjugated Goat anti-Mouse antibody.