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CD46 Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AW5239

Product Information

Application	IF, FC, IHC-P, WB
Primary Accession	P15529
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Calculated MW	43747
Isotype	Rabbit IgG
Antigen Source	HUMAN

Additional Information

Gene ID	4179
Antigen Region	317-343
Other Names	CD46; MCP; MIC10; Membrane cofactor protein; TLX; Trophoblast leukocyte common antigen; CD_antigen=CD46; Flags: Precursor
Dilution	IF~~1:10~50 FC~~1:10~50 IHC-P~~1:100~500 WB~~1:1000
Target/Specificity	This CD46 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 317-343 amino acids from the C-terminal region of human CD46.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	CD46 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	CD46
Synonyms	MCP, MIC10
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.
Cellular Location	Cytoplasmic vesicle, secretory vesicle, acrosome inner membrane; Single-pass type I membrane protein. Note=Inner acrosomal membrane of spermatozoa. Internalized upon binding of Measles virus, Herpesvirus 6 or Neisseria gonorrhoeae, which results in an increased susceptibility of infected cells to complement-mediated injury. In cancer cells or cells infected by Neisseria, shedding leads to a soluble peptide
Tissue Location	Expressed by all cells except erythrocytes.

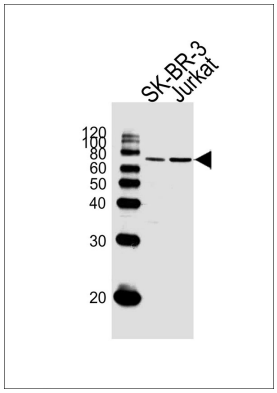
Background

CD46 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.

References

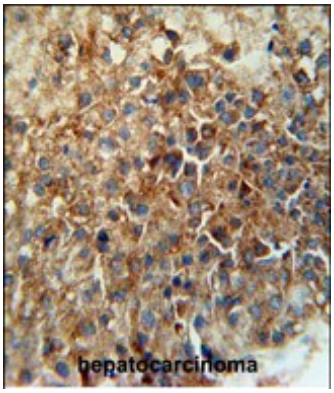
Weyand, N.J., et al. J. Immunol. 184(2):694-701(2010)
Santiago, C., et al. Acta Crystallogr. Sect. F Struct. Biol. Cryst. Commun. 66 (PT 1), 91-94 (2010)
Sullivan, M., et al. Ann. Hum. Genet. 74(1):17-26(2010)
Lee, S.W., et al. J. Cell Biol. 156(6):951-957(2002)

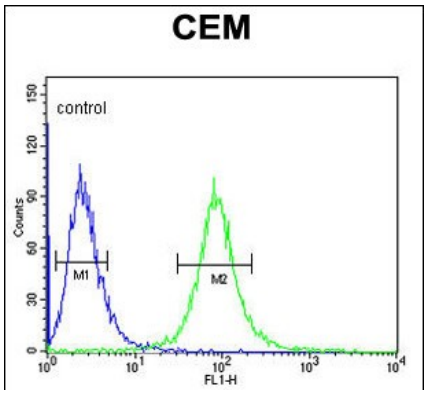
Images



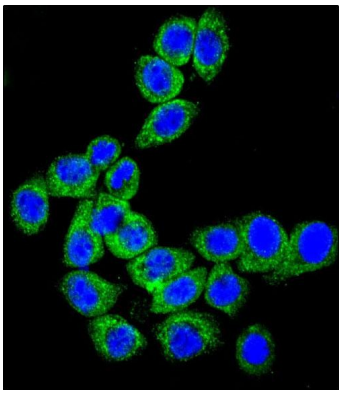
Western blot analysis of lysates from SK-BR-3,Jurkat cell line (from left to right), using CD46 Antibody (C-term)(Cat. #AW5239). AW5239 was diluted at 1:1000 at each lane. A goat anti-rabbit IgG H&L(HRP) at 1:10000 dilution was used as the secondary antibody.

CD46 Antibody (C-term) (Cat. #AW5239) immunohistochemistry analysis in formalin fixed and paraffin embedded human hepatocarcinoma followed by peroxidase conjugation of the secondary antibody and DAB staining. This data demonstrates the use of the CD46 Antibody (C-term) for immunohistochemistry. Clinical relevance has not been evaluated.





CD46 Antibody (C-term) (Cat. #AW5239) flow cytometric analysis of CEM cells (right histogram) compared to a negative control cell (left histogram).FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.



Confocal immunofluorescent analysis of CD46 Antibody (C-term) (Cat. #AW5239) with Hela cell followed by Alexa Fluor® 489-conjugated goat anti-rabbit lgG (green). DAPI was used to stain the cell nuclear (blue).