

# CD46 Antibody (Center Y354)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP20516c

## **Product Information**

Application	WB, E
Primary Accession	<u>P15529</u>
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	43747
Antigen Region	330-361

# **Additional Information**

Gene ID	4179
Other Names	Membrane cofactor protein, TLX, Trophoblast leukocyte common antigen, CD46, CD46, MCP, MIC10
Target/Specificity	This CD46 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 330-361 amino acids from the Central region of human CD46.
Dilution	WB~~1:1000 E~~Use at an assay dependent concentration.
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 (Center Y354) 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

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.

#### References

Riley R.C., et al. Mol. Reprod. Dev. 62:534-546(2002). Lublin D.M., et al. J. Exp. Med. 168:181-194(1988). Purcell D.F., et al. Immunogenetics 33:335-344(1991). Post T.W., et al. J. Exp. Med. 174:93-102(1991). Cervoni F., et al. Mol. Reprod. Dev. 34:107-113(1993).

#### Images



CD46 Antibody (Y354) (Cat. #AP20516c) western blot analysis in A549,Hela cell line lysates (35ug/lane).This demonstrates the CD46 antibody detected the CD46 protein (arrow).

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.