

CD46 Antibody (C-term) Blocking Peptide Synthetic peptide Catalog # BP4785b

### Specification

## CD46 Antibody (C-term) Blocking Peptide - Product Information

Primary Accession

#### <u>P15529</u>

### CD46 Antibody (C-term) Blocking Peptide - Additional Information

Gene ID 4179

**Other Names** Membrane cofactor protein, TLX, Trophoblast leukocyte common antigen, CD46, CD46, MCP, MIC10

Format

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

**Storage** Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

**Precautions** This product is for research use only. Not for use in diagnostic or therapeutic procedures.

### CD46 Antibody (C-term) Blocking Peptide - 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.

# CD46 Antibody (C-term) Blocking Peptide - Protocols

Provided below are standard protocols that you may find useful for product applications.

#### <u>Blocking Peptides</u>

### CD46 Antibody (C-term) Blocking Peptide - Images

## CD46 Antibody (C-term) Blocking Peptide - 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.

## CD46 Antibody (C-term) Blocking Peptide - 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)