

### CD47 Antibody (C-term) Blocking Peptide

Synthetic peptide Catalog # BP9137b

### **Specification**

CD47 Antibody (C-term) Blocking Peptide - Product Information

Primary Accession <u>Q08722</u>

CD47 Antibody (C-term) Blocking Peptide - Additional Information

Gene ID 961

### **Other Names**

Leukocyte surface antigen CD47, Antigenic surface determinant protein OA3, Integrin-associated protein, IAP, Protein MER6, CD47, CD47, MER6

### **Target/Specificity**

The synthetic peptide sequence used to generate the antibody <a href=/products/AP9137b>AP9137b</a> was selected from the C-term region of human CD47. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

#### **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.

CD47 Antibody (C-term) Blocking Peptide - Protein Information

Name CD47

# CD47 Antibody (C-term) Blocking Peptide - Background

CD47 antigen, also known as integrin associated protein (IAP), has a very broad tissue distribution. CD47 is expressed on all hematopoietic cells, including leukocytes, platelets and erythrocytes. It is also expressed on epithelial cells, endothelial cells, fibroblasts and many tumor cell lines. There are approximately 50.000 CD47 molecules per erythrocyte. The glycoprotein is deficient in erythrocytes of the rare Rh null phenotype. CD47 is a heavily N glycosylated cell membrane glycoprotein of apparent molecular weight 47-52 kDa. It may play a role as a signaltransducer in the regulation of cation fluxes across cell membranes and in the chemotactic and adhesive interactions of leukocytes with endothelial cells.

# CD47 Antibody (C-term) Blocking Peptide - References

Hatherley D., et.al., Mol. Cell 31:266-277(2008). Wollscheid B., et.al., Nat. Biotechnol. 27:378-386(2009).



### Synonyms MER6

### **Function**

Has a role in both cell adhesion by acting as an adhesion receptor for THBS1 on platelets, and in the modulation of integrins. Plays an important role in memory formation and synaptic plasticity in the hippocampus (By similarity). Receptor for SIRPA, binding to which prevents maturation of immature dendritic cells and inhibits cytokine production by mature dendritic cells. Interaction with SIRPG mediates cell-cell adhesion, enhances superantigen-dependent T-cell-mediated proliferation and costimulates T-cell activation. May play a role in membrane transport and/or integrin dependent signal transduction. May prevent premature elimination of red blood cells. May be involved in membrane permeability changes induced following virus infection.

### **Cellular Location**

Cell membrane; Multi-pass membrane protein

### **Tissue Location**

Very broadly distributed on normal adult tissues, as well as ovarian tumors, being especially abundant in some epithelia and the brain

## CD47 Antibody (C-term) Blocking Peptide - Protocols

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

• Blocking Peptides