# CD47 monoclonal antibody, clone MEM-122

Catalog # MAB3839 Size 100 ug

## Applications



#### Flow Cytometry

Surface staining of lysed and washed porcine peripheral blood with CD47 monoclonal antibody, clone MEM-122 (Cat # MAB3839) (detection by antimouse IgM FITC).

Panel A - porcine PBMC stained with Isotype mouse IgM control. Panel B, C, D - porcine PBMC sample stained with CD47 monoclonal antibody, clone MEM-122 (Cat # MAB3839). Cells in the granulocyte gate were used for analysis.

Specification	
Product Description	Mouse monoclonal antibody raised against native CD47.
Immunogen	Native purified CD47 from African Green Monkey COS-7 cells.
Host	Mouse
Theoretical MW (kDa)	50-55
Reactivity	Human
Specificity	This antibody reacts with CD47 (Integrin Associated Protein), a 50-55 KDa membrane adhesion mol ecule (thrombospondin receptor; immunoglobulin supergenefamily) expressed on leukocytes, platelet s and erythrocytes. It is also expressed on epithelial cells, endothelial cells, fibroblasts and many tum or cell lines.
Form	Liquid
Concentration	1 mg/mL
Recommend Usage	The optimal working dilution should be determined by the end user.
Storage Buffer	In PBS, pH 7.4 (0.09% sodium azide)

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### **Product Information**

**Storage Instruction** 

Store at 4°C. Do not freeze.

Note

This product contains sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which shoul d be handled by trained staff only.

## Applications

- Western Blot
- Immunohistochemistry (Frozen sections)
- Flow Cytometry

Surface staining of lysed and washed porcine peripheral blood with CD47 monoclonal antibody, clone MEM-122 (Cat # MAB3839) (detection by anti-mouse IgM FITC).

Panel A - porcine PBMC stained with lsotype mouse IgM control.

Panel B, C, D - porcine PBMC sample stained with CD47 monoclonal antibody, clone MEM-122 (Cat # MAB3839). Cells in the granulocyte gate were used for analysis.

## Gene Info — CD47

Entrez GenelD	<u>961</u>
Gene Name	CD47
Gene Alias	IAP, MER6, OA3
Gene Description	CD47 molecule
Omim ID	<u>601028</u>
Gene Ontology	<u>Hyperlink</u>
Gene Summary	This gene encodes a membrane protein, which is involved in the increase in intracellular calcium concentration that occurs upon cell adhesion to extracellular matrix. The encoded protein is also a receptor for the C-terminal cell binding domain of thrombospondin, and it may play a role in memb rane transport and signal transduction. This gene has broad tissue distribution, and is reduced in expression on Rh erythrocytes. Four alternatively spliced transcript variants encoding distinct isof orms have been found for this gene. [provided by RefSeq
Other Designations	CD47 antigen CD47 antigen (Rh-related antigen, integrin-associated signal transducer) CD47 gly coprotein Rh-related antigen antigen identified by monoclonal antibody 1D8 antigenic surface det erminant protein OA3 integrin associated protein integrin-associa



#### **Publication Reference**

• <u>CD47 associates with alpha 5 integrin and regulates responses of human articular chondrocytes to</u> <u>mechanical stimulation in an in vitro model.</u>

Orazizadeh M, Lee HS, Groenendijk B, Sadler SJ, Wright MO, Lindberg FP, Salter DM. Arthritis Research & Therapy 2008 Jan; 10(1):R4.

Application: Func, IHC, WB, Human, Human articular cartilage, normal and osteoarthritic chondrocytes

• Blockade of thrombospondin-1-CD47 interactions prevents necrosis of full thickness skin grafts.

Isenberg JS, Pappan LK, Romeo MJ, Abu-Asab M, Tsokos M, Wink DA, Frazier WA, Roberts DD. Annals of Surgery 2008 Jan; 247(1):180.

Application: WB-Ce, Human, HUVECs

Role for CD47-SIRPalpha signaling in xenograft rejection by macrophages.

lde K, Wang H, Tahara H, Liu J, Wang X, Asahara T, Sykes M, Yang YG, Ohdan H. PNAS 2007 Mar; 104(12):5062.

Application: Flow cyt, IF, Human, PBMC, Porcine LCL, pKS336-transfected porcine LCL, pKS336-human CD47-transfected porcine LCL cells

#### Pathway

• ECM-receptor interaction