

## CD97 monoclonal antibody, clone MEM-180 (FITC)

Catalog # MAB5039 Size 100 Reactions

Mouse monoclonal antibody raised against native CD97.					
Native purified CD97 from PHA-activated peripheral blood cells.					
Mouse					
75-85					
Human					
This antibody recognizes an unique epitope on CD97, a 75-85 KDa surface glycoprotein of G-prot n-coupled receptor family, expressed on activated B and T lymphocytes, monocytes/macrophages endritic cells and granulocytes.					
Liquid					
FITC					
lgG1					
Flow Cytometry (20 ul in human blood cells 100 ul in whole blood or 10 <sup>6</sup> cells in a suspension) The optimal working dilution should be determined by the end user.					
In PBS (0.2% BSA, 0.09% sodium azide)					
Store in the dark at 4°C. Do not freeze.  Avoid prolonged exposure to light.  Aliquot to avoid repeated freezing and thawing.					
This product contains sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which shoul d be handled by trained staff only.					

## Applications

Flow Cytometry



Gene Info — CD97						
Entrez GeneID	976					
Gene Name	CD97					
Gene Alias	TM7LN1					
Gene Description	CD97 molecule					
Omim ID	601211					
Gene Ontology	<u>Hyperlink</u>					
Gene Summary	This gene is a member of the EGF-TM7 family of class II seven-span transmembrane (7-TM) mole cules, likely encoded by a gene cluster on the short arm of chromosome 19. The encoded product is a glycoprotein that is present on the surface of most activated leukocytes and spans the membrane seven times, which is a defining feature of G protein-coupled receptors. The protein has an extended extracellular region with several N-terminal epidermal growth factor (EGF)-like domains, which mediate binding to its cellular ligand, decay accelerating factor (DAF, CD55), a regulatory protein of the complement cascade. The presence of structural features characteristic of extracell ular matrix proteins and transmembrane proteins suggests that this protein is a receptor involved in both cell adhesion and signaling processes early after leukocyte activation. Alternative splicing has been observed for this gene and three variants have been found. [provided by RefSeq					
Other Designations	CD97 antigen leukocyte antigen CD97 seven transmembrane helix receptor seven-span transmembrane protein seven-transmembrane, heterodimeric receptor associated with inflammation					

## **Publication Reference**

 Structural and functional characterization of a novel T cell receptor co-regulatory protein complex, CD97-CD55.

Abbott RJ, Spendlove I, Roversi P, Fitzgibbon H, Knott V, Teriete P, McDonnell JM, Handford PA, Lea SM.

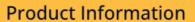
The Journal of Biological Chemistry 2007 Jul; 282(30):22023.

Application: Flow Cyt, Func, Human, PBMCs

• <u>Improved antibacterial host defense and altered peripheral granulocyte homeostasis in mice lacking the adhesion class G protein receptor CD97.</u>

Wang T, Tian L, Haino M, Gao JL, Lake R, Ward Y, Wang H, Siebenlist U, Murphy PM, Kelly K. Infection and Immunity 2007 Mar; 75(3):1144.

Application: Flow Cyt, Mouse, Mouse bone marrow granulocytes, splenic B and T cells





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Galle J, Sittig D, Hanisch I, Wobus M, Wandel E, Loeffler M, Aust G.

The American Journal of Pathology 2006 Nov; 169(5):1802.

## Disease

- Cardiovascular Diseases
- Diabetes Mellitus
- Edema
- Kidney Failure