

CD97 monoclonal antibody, clone MEM-180 (FITC)

Catalog # MAB5039

Size 100 Reactions

Specification

Product Description	Mouse monoclonal antibody raised against native CD97.
Immunogen	Native purified CD97 from PHA-activated peripheral blood cells.
Host	Mouse
Theoretical MW (kDa)	75-85
Reactivity	Human
Specificity	This antibody recognizes an unique epitope on CD97, a 75-85 KDa surface glycoprotein of G-protein-coupled receptor family, expressed on activated B and T lymphocytes, monocytes/macrophages, dendritic cells and granulocytes.
Form	Liquid
Conjugation	FITC
Isotype	IgG1
Recommend Usage	Flow Cytometry (20 ul in human blood cells 100 ul in whole blood or 10^6 cells in a suspension) The optimal working dilution should be determined by the end user.
Storage Buffer	In PBS (0.2% BSA, 0.09% sodium azide)
Storage Instruction	Store in the dark at 4°C. Do not freeze. Avoid prolonged exposure to light. Aliquot to avoid repeated freezing and thawing.
Note	This product contains sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should 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 [Hyperlink](#)

Gene Summary This gene is a member of the EGF-TM7 family of class II seven-span transmembrane (7-TM) molecules, 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 extracellular 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

- [Improved antibacterial host defense and altered peripheral granulocyte homeostasis in mice lacking the adhesion class G protein receptor CD97.](#)

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

- [Individual cell-based models of tumor-environment interactions: Multiple effects of CD97 on tumor invasion.](#)

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](#)