

# CD97 Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP13768b

### **Product Information**

Application	WB, IHC-P, E
Primary Accession	<u>P48960</u>
Other Accession	<u>NP_001775.2, NP_510966.1, NP_001020331.1</u>
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB33868
Calculated MW	91869
Antigen Region	707-736

#### **Additional Information**

Gene ID	976
Other Names	CD97 antigen, Leukocyte antigen CD97, CD97, CD97 antigen subunit alpha, CD97 antigen subunit beta, CD97
Target/Specificity	This CD97 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 707-736 amino acids from the C-terminal region of human CD97.
Dilution	WB~~1:1000 IHC-P~~1:100~500 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	CD97 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

#### **Protein Information**

Name	ADGRE5 ( <u>HGNC:1711</u> )
Function	Receptor potentially involved in both adhesion and signaling processes early after leukocyte activation. Plays an essential role in leukocyte migration.

Cellular Location	Cell membrane {ECO:0000250 UniProtKB:Q9Z0M6}; Multi-pass membrane protein
Tissue Location	Broadly expressed, found on most hematopoietic cells, including activated lymphocytes, monocytes, macrophages, dendritic cells, and granulocytes. Expressed also abundantly by smooth muscle cells. Expressed in thyroid, colorectal, gastric, esophageal and pancreatic carcinomas too. Expression are increased under inflammatory conditions in the CNS of multiple sclerosis and in synovial tissue of patients with rheumatoid arthritis. Increased expression of CD97 in the synovium is accompanied by detectable levels of soluble CD97 in the synovial fluid

# Background

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.

## References

Bailey, S.D., et al. Diabetes Care 33(10):2250-2253(2010) Liu, D., et al. Int. J. Oncol. 36(6):1401-1408(2010) Han, S.L., et al. Int J Colorectal Dis 25(6):695-702(2010) van Eijk, M., et al. Immunol. Lett. 129(2):64-71(2010) Davila, S., et al. Genes Immun. 11(3):232-238(2010)

#### Images



CD97 Antibody (C-term) (Cat. #AP13768b)immunohistochemistry analysis in formalin fixed and paraffin embedded human placenta tissue followed by peroxidase conjugation of the secondary antibody and DAB staining.This data demonstrates the use of CD97 Antibody (C-term) for immunohistochemistry. Clinical relevance has not been evaluated.



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