

## CD97 Antibody (monoclonal) (M01)

Mouse monoclonal antibody raised against a partial recombinant CD97. Catalog # AT1451a

#### Specification

## CD97 Antibody (monoclonal) (M01) - Product Information

Application Primary Accession Other Accession Reactivity Host Clonality Isotype Calculated MW WB, E <u>P48960</u> <u>NM\_078481</u> Human mouse Monoclonal IgG2a Kappa 91869

## CD97 Antibody (monoclonal) (M01) - Additional Information

Gene ID 976

Other Names CD97 antigen, Leukocyte antigen CD97, CD97, CD97 antigen subunit alpha, CD97 antigen subunit beta, CD97

**Target/Specificity** CD97 (NP\_510966, 421 a.a. ~ 529 a.a) partial recombinant protein with GST tag. MW of the GST tag alone is 26 KDa.

**Dilution** WB~~1:500~1000 E~~N/A

Format Clear, colorless solution in phosphate buffered saline, pH 7.2 .

Storage Store at -20°C or lower. Aliquot to avoid repeated freezing and thawing.

**Precautions** CD97 Antibody (monoclonal) (M01) is for research use only and not for use in diagnostic or therapeutic procedures.

#### CD97 Antibody (monoclonal) (M01) - Protocols

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

- <u>Western Blot</u>
- Blocking Peptides

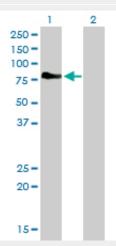


- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

CD97 Antibody (monoclonal) (M01) - Images

175 -	
83 -	
62 -	
47.5=	
32.5-	
25=	
16-	

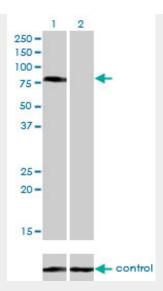
Antibody Reactive Against Recombinant Protein.Western Blot detection against Immunogen (37.73 KDa).



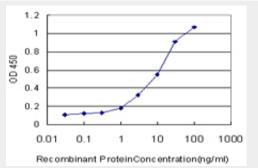
Western Blot analysis of CD97 expression in transfected 293T cell line by CD97 monoclonal antibody (M01), clone 5D5.

Lane 1: CD97 transfected lysate(81.7 KDa). Lane 2: Non-transfected lysate.





Western blot analysis of CD97 over-expressed 293 cell line, cotransfected with CD97 Validated Chimera RNAi ( (Cat # AT1451a )



Detection limit for recombinant GST tagged CD97 is approximately 0.1ng/ml as a capture antibody.

# CD97 Antibody (monoclonal) (M01) - 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.

# CD97 Antibody (monoclonal) (M01) - References

Variation at the NFATC2 Locus Increases the Risk of Thiazolinedinedione-Induced Edema in the Diabetes REduction Assessment with ramipril and rosiglitazone Medication (DREAM) Study. Bailey SD, et al. Diabetes Care, 2010 Jul 13. PMID 20628086.Role of CD97 isoforms in gastric carcinoma. Liu D, et al. Int J Oncol, 2010 Jun. PMID 20428763.The impact of expressions of CD97 and its ligand CD55 at the invasion front on prognosis of rectal adenocarcinoma. Han SL, et al. Int J Colorectal Dis, 2010 Jun. PMID 20339853.New genetic associations detected in a host response study to hepatitis B vaccine. Davila S, et al. Genes Immun, 2010 Apr. PMID 20237496.Differential expression of the EGF-TM7 family members CD97 and EMR2 in lipid-laden macrophages in atherosclerosis, multiple



sclerosis and Gaucher disease. van Eijk M, et al. Immunol Lett, 2010 Apr 8. PMID 20167235.