

Rabbit anti-Mouse, Rat CD97/Adgre5 Polyclonal Antibody | anti-Adgre5 antibody

Anti-CD97/Adgre5 Antibody

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA125827	Rabbit	Mouse, Rat	ELISA, Flow Cytometry, Functional Assay, Immunohistochemistry, Western Blot

PRODUCT SYNONYMS

CD97/Adgre5; Polyclonal Antibody; Anti-CD97/Adgre5 Antibody; Cd97; CD97 antigen; CD antigen CD97 [Cleaved into: CD97 antigen subunit alpha; CD97 antigen subunit beta]; adhesion G protein-coupled receptor E5; anti-Adgre5 antibody

PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Mouse, Rat
Clonality	Polyclonal
Isotype	Rabbit IgG
Specificity	Rabbit IgG polyclonal antibody for CD97/Adgre5 detection.
Purity/Purification	Immunogen affinity purified.
Form/Format	Lyophilized. Each vial contains 4mg Trehalose, 0.9mg NaCl and 0.2mg Na ₂ HPO ₄ .
Applicable Applications for anti-Adgre5 antibody	ELISA (Direct ELISA), FCM/FACS (Flow Cytometry), IHC (Immunohistochemistry), WB (Western Blot)
Immunogen	E Coli-derived mouse CD97/Adgre5 recombinant protein (Position: Q287-S816).
Reconstitution	Add 0.2ml of distilled water will yield a concentration of 500ug/ml.
Recommended Detection Systems	Recommended Detection Systems
Preparation and Storage	Store at -20 degree C for one year. After reconstitution, at 4 degree C for one month. It can also be aliquotted and stored frozen at -20 degree C for a longer time. Avoid repeated freezing and thawing.

IMAGES



FCM/FACS (Flow Cytometry)

Figure 3. Flow Cytometry analysis of mouse PBMC cells using anti-CD97/Adgre5 antibody (AAA125827). Overlay histogram showing mouse PBMC cells stained with AAA125827 (Blue line). The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-CD97/Adgre5 Antibody (AAA125827, 1µg/1x10⁶ cells) for 30 min at 20 degree C. DyLight[®]488 conjugated goat anti-rabbit IgG (5-10µg/1x10⁶ cells) was used as secondary antibody for 30 minutes at 20 degree C. Isotype control antibody (Green line) was rabbit IgG (1µg/1x10⁶) used under the same conditions. Unlabelled sample (Red line) was also used as a control.



IHC (Immunohistochemistry)

Figure 2. IHC analysis of CD97/Adgre5 using anti-CD97/Adgre5 antibody (AAA125827). CD97/Adgre5 was detected in paraffin-embedded section of mouse brain tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2µg/ml rabbit anti-CD97/Adgre5 Antibody (AAA125827) overnight at 4 degree C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37 degree C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC) with DAB as the chromogen.



WB (Western Blot)

Figure 1. Western blot analysis of CD97/Adgre5 using anti-CD97/Adgre5 antibody (AAA125827). Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 50ug of sample under reducing conditions. Lane 1: rat spleen tissue lysates Lane 2: rat lung tissue lysates Lane 3: mouse spleen tissue lysates Lane 4: mouse lung tissue lysates Lane 5: mouse NIH/3T3 whole cell lysates Lane 6: mouse RAW264, 7 whole cell lysates Lane 7: mouse ANA-1 whole cell lysates. After Electrophoresis, proteins were transferred to a Nitrocellulose membrane at 150mA for 50-90 minutes. Blocked the membrane with 5% Non-fat Milk/ TBS for 1. 5 hour at RT. The membrane was incubated with rabbit anti-CD97/Adgre5 antigen affinity purified polyclonal antibody (Catalog # AAA125827) at 0. 25 μg/mL overnight at 4 degree C, then washed with TBS-0. 1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:5000 for 1. 5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit with Tanon 5200 system. A specific band was detected for CD97/Adgre5 at approximately 92KD. The expected band size for CD97/Adgre5 is at 92KD.

ADDITIONAL INFORMATION

Related Product Information for anti-Adgre5 antibody	Cluster of differentiation 97 is a protein also known as BL-Ac[F2] encoded by the ADGRE5 gene. This gene encodes a member of the EGF-TM7 subfamily of adhesion G protein-coupled receptors, which mediate cell-cell interactions. These proteins are cleaved by self-catalytic proteolysis into a large extracellular subunit and seven-span transmembrane subunit, which associate at the cell surface as a receptor complex. The encoded protein may play a role in cell adhesion as well as leukocyte recruitment, activation and migration, and contains multiple extracellular EGF-like repeats which mediate binding to chondroitin sulfate and the cell surface complement regulatory protein CD55. Expression of this gene may play a role in the progression of several types of cancer. Alternatively spliced transcript variants encoding multiple isoforms with 3 to 5 EGF-like repeats have been observed for this gene. This gene is found in a cluster with other EGF-TM7 genes on the short arm of chromosome 19.
References	1. Hamann, J., Eichler, W., Hamann, D., Kerstens, H. M. J., Poddighe, P. J., Hoovers, J. M. N., Hartmann, E., Strauss, M., van Lier, R. A. W. Expression cloning and chromosomal mapping of the leukocyte activation antigen CD97, a new seven-span transmembrane molecule of the secretin receptor superfamily with an unusual extracellular domain. J. Immun. 155: 1942-1950, 1995. 2. Hamann, J., Hartmann, E., van Lier, R. A. W. Structure of the human CD97 gene: exon shuffling has generated a new type of seven-span transmembrane molecule related to the secretin receptor superfamily. Genomics 32: 144-147, 1996. 3. Hamann, J., Vogel, B., van Schijndel, G. M., van Lier, R. A. The seven-span transmembrane receptor CD97 has a cellular ligand (CD55, DAF). J. Exp. Med. 184: 1185-1189, 1996.

NCBI AND UNIPROT INFORMATION

NCBI GI #	251823841
NCBI GeneID	26364
NCBI Accession #	NP_001156501.1
NCBI GenBank Nucleotide #	NM_001163029.1
UniProt Accession #	Q9Z0M6; Q923A1; Q9CVI5; Q9JLQ8
Molecular Weight	90,413 Da
NCBI Official Full Name	CD97 antigen isoform 2
NCBI Official Synonym Full Names	CD97 antigen
NCBI Official Symbol	Cd97
NCBI Official Synonym Symbols	TM7LN1; AA409984
NCBI Protein Information	CD97 antigen; EGF-TM7 receptor

UniProt Protein Name	CD97 antigen
UniProt Gene Name	Cd97
UniProt Entry Name	CD97_MOUSE

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

AAA Biotech | Tel: +1 (619) 604-9440 | Fax: +1 (619) 604-9441 | contact@aaabiotech.com
Online datasheet: <https://stage.aaabiotech.com/polyclonal/cd97-adgre5-antibody-direct-elisa-flow-cytometry-immunohistochemistry-western-blot-elisa/125827>