

# Rabbit Anti-CD97 antibody

SL2522R

Product Name:	CD97
Chinese Name:	CD97抗体
Alias:	CD97 antigen subunit beta; Leukocyte antigen CD97; CD 97; CD97; CD97 antigen; CD97 molecule; CD97_HUMAN; Leukocyte antigen CD97; Seven span transmembrane protein; Seven transmembrane helix receptor; Seven transmembrane
	heterodimeric receptor associated with inflammation; TM7LN 1; TM7LN1.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human, Mouse, Rat, Dog, Pig, Cow,
Applications:	ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800Flow-Cyt=1µg/TestIF=1:100-
	500 (Paraffin sections need antigen repair)
	not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	34/92kDa
<b>Cellular localization:</b>	The cell membraneExtracellular matrixSecretory protein
Form:	Lyophilized or Liquid
Concentration:	lmg/ml
immunogen:	KLH conjugated synthetic peptide derived from human CD97 antigen subunit beta:741- 835/835 <cytoplasmic></cytoplasmic>
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
PubMed:	PubMed
Product Detail:	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 EGFlike 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. [provided by RefSeq, Jun 2011].

#### **Function:**

Receptor potentially involved in both adhesion and signaling processes early after leukocyte activation. Plays an essential role in leukocyte migration.

## Subunit:

Forms a heterodimer, consisting of a large extracellular region (alpha subunit) noncovalently linked to a seven-transmembrane moiety (beta subunit). Interacts with complement decay-accelerating factor (DAF). The largest isoform (isoform 1) interacts with chondroitin sulfate.

## Subcellular Location:

Cell membrane; Multi-pass membrane protein. CD97 antigen subunit alpha: Secreted, extracellular space.

## **Tissue Specificity:**

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 accompagnied by detectable levels of soluble CD97 in the synovial fluid.

## **Post-translational modifications:**

Proteolytically cleaved into 2 subunits, an extracellular alpha subunit and a seventransmembrane subunit.

#### Similarity:

Belongs to the G-protein coupled receptor 2 family. LN-TM7 subfamily. Contains 5 EGF-like domains. Contains 1 GPS domain.

SWISS: P48960

Gene ID: 976

	Database links:
	Entrez Gene: 976Human
	Entrez Gene: 26364Mouse
	Entrez Gene: 361383Rat
	Omim: 601211Human
	SwissProt: P48960Human
	<u>SwissProt: Q9Z0M6</u> Mouse
	Unigene: 466039Human
	Unigene: 334648Mouse
	Unigene: 107655Rat
	Important Note:
	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Picture:	
	Paraformaldehyde-fixed, paraffin embedded (human colon carcinoma); Antigen
	retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous
	peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat
	serum) at 37°C for 30min; Antibody incubation with (CD97) Polyclonal Antibody,
	Unconjugated (SL2522R) at 1:400 overnight at 4°C, followed by operating
	according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.

