

Product name:	Cleaved-CD97 β (S531) Rabbit Polyclonal Antibody
Cat number:	ABN08981
Conjugate:	Unconjugated
Size:	100 μ L
Clone:	Polyclonal
Concentration:	1mg/ml
Host:	Rabbit
Isotype:	IgG
Immunogen:	The antiserum was produced against synthesized peptide derived from human CD97 beta. AA range:512-561
Reactivity:	Human,Rat,Mouse
Applications:	WB 1:500-1:2000,ELISA 1:5000-1:10000
Molecular Weight:	34kDa
Purification:	Affinity purification
Form:	Liquid
Buffer:	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% New type preservative N.
Storage:	Store at 4°C short term. Aliquot and store at -20°C for 12 months. Avoid freeze/thaw cycles.

Background:

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 1.

domain: Binding to chondroitin sulfate is mediated by the fourth EGF domain.
domain: The first two EGF domains mediate the interaction with DAF. A third tandemly arranged EGF domain is necessary for the structural integrity of the binding region.
function: Receptor potentially involved in both adhesion and signaling processes early after leukocyte activation. Plays an essential role in leukocyte migration.
induction: Rapid up-regulation during lymphocyte activation.
PTM: Proteolytically cleaved into 2 subunits, an extracellular alpha subunit and a seven-transmembrane subunit.
similarity: Belongs to the G-protein coupled receptor 2 family. LN-TM7 subfamily.
similarity: Contains 1 GPS domain.
similarity: Contains 5 EGF-like domains.
subunit: Forms a heterodimer, consisting of a large extracellular region (alpha subunit) non-covalently linked to a seven-transmembrane moiety (beta subunit). Interacts with complement decay-accelerating factor (DAF). The largest isoform (isoform 1) interacts with chondroitin sulfate.
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 accompanied by detectable levels of soluble CD97 in the synovial fluid.