

CD97 recombinant protein

Recombinant Human CD97 Protein (His tag)(Active)

CATALOG #
AAA173549

HOST
HEK293 cells

PRODUCT SYNONYMS

CD97; Recombinant Human CD97 Protein (His tag)(Active); TM7LN1; CD97 recombinant protein

PRODUCT SPECIFICATIONS

Host	HEK293 cells
Purity/Purification	> 85 % as determined by SDS-PAGE
Form/Format	Lyophilized from sterile PBS, pH7.4, 5% Trehalose, 5% Mannitol, 0.01 % Tween-80.
Sequence Length	742
Species	Human
Predicted N Terminal	Gln 21
Mol_Mass	42.6 kDa
AP_Mol_Mass	60-70kDa
Tag	C-His
Bio_activity	Inmobilized recombinant human CD97 at 10 ug/mL (100 uL/well) can bind recombinant human human CD55 at a linear range of 0.46-30 ug/mL.
Reconstitution	We recommend centrifuging the vial before opening to bring the contents to the bottom. Do not mix by vortex. It is recommended that sterile water be added to the vial to prepare a stock solution of 0.25 mg/mL. Concentration is measured by UV-Vis.
Background	The cluster of differentiation (CD) system is commonly used as cell markers in immunophenotyping. Different kinds of cells in the immune system can be identified through the surface CD molecules which associating with the immune function of the cell. There are more than 320 CD unique clusters and subclusters have been identified. Some of the CD molecules serve as receptors or ligands important to the cell through initiating a signal cascade which then alter the behavior of the cell. Some CD proteins do not take part in cell signal process but have other functions such as cell adhesion. The CD97 is a receptor predominantly expressed in leukocytes and belongs to a new group of seven-span transmembrane molecules, which is also designed EGF-TM7 family. The family members are characterized by an extended extracellular region with several N-terminal epidermal growth factor-like domains two of which contain a calcium binding site. Mature CD 97 has two noncovalently associated subunits and is composed of a large extracellular protein (CD97 alpha) and a seven-membrane spanning protein (CD97 beta). CD97 is considered as a defining feature of G protein-coupled receptors. The effects that lymphocytes and erythrocytes adhere to CD97-transfected COS cells suggest that CD97 has the ability to bind cellular ligands. CD97 alpha has three alternatively spliced isoforms that are related to the calcium binding EGF-like repeats in the microfibril protein fibrillin. Leukocytes strongly positive for CD97 are concentrated at sites of inflammation relative to CD97 expression in normal lymphoid tissues.
Preparation and Storage	Generally, lyophilized proteins are stable for up 12 months when stored at -20°C to -80°C. Reconstituted protein solution can be stored at -20°C to -80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 day. Aliquots of reconstituted samples are stable at <-20°C for 3 months .

IMAGES



SDS-PAGE

ADDITIONAL INFORMATION

Related Product Information for CD97 recombinant protein	A DNA sequence encoding the first 398 amino acids (Met 1-Gln 398) of human CD97 isoform 2 (NP_001775.2) extracellular domain was fused with a polyhistidine tag at the C-terminus.
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NCBI AND UNIPROT INFORMATION

NCBI GI #	17978489
NCBI GeneID	976
NCBI Accession #	NP_001775.2
NCBI GenBank Nucleotide #	NM_001784.4
UniProt Accession #	P48960; O00718; O76101; Q8NG72; Q8TBQ7; A8K7Z4; B2RBJ9
NCBI Official Full Name	CD97 antigen isoform 2 preproprotein
NCBI Official Synonym Full Names	adhesion G protein-coupled receptor E5
NCBI Official Symbol	ADGRE5
NCBI Official Synonym Symbols	CD97; TM7LN1
NCBI Protein Information	CD97 antigen
UniProt Protein Name	CD97 antigen
UniProt Gene Name	CD97

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.