Recombinant Human CD97 Protein (Fc Tag)

Catalog Number: PKSH031170

Note: *Centrifuge before opening to ensure complete recovery of vial contents.*

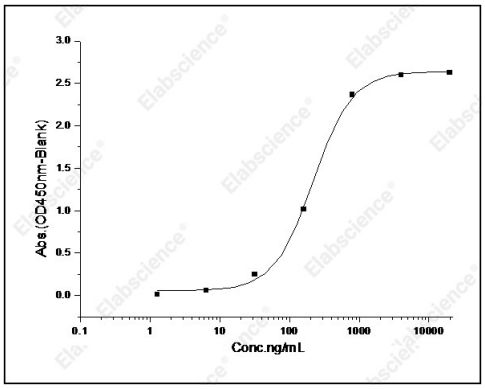
Description

Species	Human
Source	HEK293 Cells-derived Human CD97 protein Met 1-Gln 398, with an C-terminal hFc
Calculated MW	68.2 kDa
Observed MW	100-110 kDa
Accession	NP_001775.2
Bio-activity	Immobilized human CD55 at 2 μg/ml (100 μl/well) can bind human CD97 with a linear ranger of 1.28-32 ng/ml.

Properties

Purity	> 90% as determined by reducing SDS-PAGE.
Endotoxin	< 1.0 EU per μg of the protein as determined by the LAL method.
Storage	Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.
Shipping	This product is provided as lyophilized powder which is shipped with ice packs.
Formulation	Lyophilized from sterile PBS, pH 7.4 Normally 5% - 8% trehalose, mannitol and 0.01% Tween 80 are added as protectants before lyophilization. Please refer to the specific buffer information in the printed manual.
Reconstitution	Please refer to the printed manual for detailed information.

Data



Measured by its binding ability in a functional ELISA.
Immobilized human CD55 at 2 μg/ml (100 μl/well) can bind human CD97 with a linear range of 1.28-32 ng/ml.

Background

The cluster of differentiation (CD) system is commonly used as cell markers in immunophynotyping. 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. Muture 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 adere to CD97-transfected COS cells suggest that CD97 has the ability to bind cellular ligands. CD97 alpha has three alternatively spliced isforms that are related to the calium 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.

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