

**Recombinant Human CD97 Protein (His tag)****Cat.NO.: TP07641**

3th Edition

**Synonyms:**CD97;TM7LN1

**Description:**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.

**Form:**PBS**Molecular Weight:**42.6 kDa**Sequences:**Met 1-Gln 398**Purity:**> 95% by HPLC**Concentration:****Endotoxin Level:**<1.0 EU per 1 ug of protein (determined by LAL method)**Storage:**Can be stored at +4°C short term (1-2 weeks). For long term storage, aliquot and store at -20°C or -70°C. Avoid repeated freezing and thawing cycles.