



# Recombinant Protein Technical Manual

**Recombinant Human CD7/GP40 Protein (His Tag)(Active)**  
RPES2185

## Product Data:

**Product SKU:** RPES2185

**Size:** 50µg

**Species:** Human

**Expression host:** HEK293 Cells

**Uniprot:** NP\_006128.1

## Protein Information:

**Molecular Mass:** 18 kDa

**AP Molecular Mass:** 30-35 kDa

**Tag:** C-His

**Bio-activity:** Measured by its binding ability in a functional ELISA. Immobilized human CD7-His at 10 µg/ml (100 µl /well) can bind biotinylated SECTM1-His, The EC50 of biotinylated SECTM1-His is 11-26ng/ml.

**Purity:** > 95 % as determined by reducing SDS-PAGE.

**Endotoxin:** < 1.0 EU per µg as determined by the LAL method.

**Storage:** 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

**Reconstitution:** Please refer to the printed manual for detailed information.

**Application:** Functional ELISA

**Synonyms:** T-Cell Antigen CD7; GP40; T-Cell Leukemia Antigen; T-Cell Surface Antigen Leu-9; TP41; CD7

## Immunogen Information:

**Sequence:** Met 1-Pro 180

## 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 associate 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. CD7 is a transmembrane protein which is a member of the immunoglobulin superfamily. This protein is found on thymocytes and mature T cells. It plays an essential role in T-cell interactions and also in T-cell / B-cell interaction during early lymphoid development.