

## CD7

Catalog # PVGS1892

## **Product Information**

Primary Accession P09564
Species Human

Sequence Ala26-Pro180

**Purity** > 95% as determined by Bis-Tris PAGE

> 95% as determined by HPLC

**Endotoxin Level** Less than 1EU per g by the LAL method.

**Biological Activity** Measured by its binding ability in a functional ELISA. Immobilized CD7

[Biotin], His & Avi, Human at 0.5 [g/ml (100 []/well) on the streptavidin precoated plate (5 [g/ml) can bind Anti-CD7 Antibody, hFc Tag. Test result was

comparable to standard batch.

Expression System HEK293

Theoretical Molecular Weight 19.3 kDa

**Formulation** Lyophilized from a 0.22 Im filtered solution in PBS , (pH 7.4).

**Reconstitution** Centrifuge the tube before opening. Reconstituting to a concentration more

than 100 [g/ml is recommended. Dissolve the lyophilized protein in distilled

water.

**Storage & Stability** Upon receiving, the product remains stable up to 6 months at -20 °C or below.

Upon reconstitution, the product should be stable for 3 months at -80 °C.

Avoid repeated freeze-thaw cycles.

## **Additional Information**

Gene ID 924

Other Names T-cell antigen CD7, GP40, T-cell leukemia antigen, T-cell surface antigen Leu-9,

TP41, CD7, CD7

**Target Background** CD7, also known as Leu-9, is an approximately 40 kDa glycosylated and

palmitoylated transmembrane protein in the immunoglobulin

superfamily.CD7 is expressed on T cells, NK cells, myeloid progenitor cells, and CD19 B progenitor cells. Among CD8 T cells, the CD7-bright population preferentially contains na Ive and memory cells, while more weak expressors

are primarily effector cells.

## **Protein Information**

Name CD7

**Function** Transmembrane glycoprotein expressed by T-cells and natural killer (NK)

cells and their precursors (PubMed:<u>7506726</u>). Plays a costimulatory role in T-cell activation upon binding to its ligand K12/SECTM1 (PubMed:<u>10652336</u>). In turn, mediates the production of cytokines such as IL-2 (PubMed:<u>1709867</u>).

On resting NK-cells, CD7 activation results in a significant induction of

interferon-gamma levels (PubMed: 7506726).

**Cellular Location** Membrane; Single-pass type I membrane protein.

**Tissue Location** Expressed on T-cells and natural killer (NK) cells and their precursors.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.