

CD7
Catalog # PVGS1892**Specification**

CD7 - 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 µg by the LAL method.

Biological Activity
Measured by its binding ability in a functional ELISA. Immobilized CD7 [Biotin], His & Avi, Human at 0.5 µg/ml (100 µl/well) on the streptavidin precoated plate (5 µg/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 µm filtered solution in PBS (pH 7.4).**

Reconstitution
Centrifuge the tube before opening. Reconstituting to a concentration more than 100 µg/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.

CD7 - 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 naïve and memory cells, while more weak expressors are primarily effector cells.

CD7 - Protein Information

Name CD7

Function

Transmembrane glycoprotein expressed by T-cells and natural killer (NK) cells and their precursors (PubMed:<[7506726](http://www.uniprot.org/citations/7506726)>). Plays a costimulatory role in T-cell activation upon binding to its ligand K12/SECTM1 (PubMed:<[10652336](http://www.uniprot.org/citations/10652336)>). In turn, mediates the production of cytokines such as IL-2 (PubMed:<[1709867](http://www.uniprot.org/citations/1709867)>). On resting NK-cells, CD7 activation results in a significant induction of interferon-gamma levels (PubMed:<[7506726](http://www.uniprot.org/citations/7506726)>).

Cellular Location

Membrane; Single-pass type I membrane protein.

Tissue Location

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

CD7 - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

CD7 - Images