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# CD7

Catalog # PVGS1854

## Product Information

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| **Primary Accession** | P09564 |
| **Species** | Human |
| **Sequence** | Ala26-Pro180 |
| **Purity** | > 95% as determined by Bis-Tris PAGE<br>> 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, His & Avi, Human at 0.5 g/ml (100 l/well) on the plate 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 m 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

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| **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 ve and memory cells, while more weak expressors are primarily effector cells. |

## Protein Information

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| **Name** | CD7 |
| **Function** | Transmembrane glycoprotein expressed by T-cells and natural killer (NK) cells and their precursors (PubMed:7506726). Plays a costimulatory role in T-cell activation upon binding to its ligand K12/SECTM1 (PubMed:10652336). In turn, mediates the production of cytokines such as IL-2 (PubMed:1709867). 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'.