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CD7

Catalog # PVGS1857

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 hFc Chimera, Human at 1 μg/ml (100 μl/well) on the plate can bind Biotinylated Anti-CD7 Antibody, hFc Tag. Test result was comparable to standard batch.

Expression System
HEK293

Theoretical Molecular Weight
43.19 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). 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.

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 Cytomety
- Cell Culture

CD7 - Images