

## CD7 active protein

CD7 Protein, Human, Recombinant (His Tag)

CATALOG #  
**AAA257959**

HOST  
**HEK293 Cells**

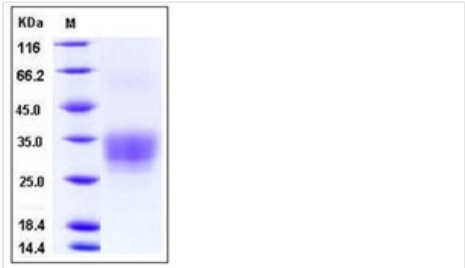
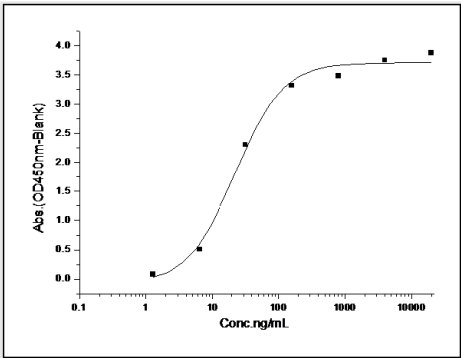
### PRODUCT SYNONYMS

CD7; CD7 Protein; Human; Recombinant (His Tag); Human CD7 Protein (His Tag); GP40 Protein; LEU-9 Protein; Tp40 Protein; TP41 Protein; CD7 molecule; CD7 active protein

### PRODUCT SPECIFICATIONS

|                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|-------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Host                    | HEK293 Cells                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| Purity/Purification     | >95% as determined by SDS-PAGE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| Form/Format             | Lyophilized from sterile PBS, pH7.4. Normally 5%-8% trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization. Please refer to the specific buffer information in the hard copy of CoA.                                                                                                                                                                                                                                                                                               |
| Sequence                | Met1-Pro180                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| Species                 | Human                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Endotoxin               | <1.0EU per ug of the protein as determined by the LAL method                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| Predicted N Terminal    | Ala 26                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| Tag                     | C-His                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Protein Construction    | A DNA sequence encoding the human CD7 (NP_006128.1) extracellular domain (Met 1-Pro 180) was expressed, with a polyhistidine tag at the C-terminus.                                                                                                                                                                                                                                                                                                                                                              |
| Reconstitution          | A hardcopy of COA with reconstitution instruction is sent along with the products. Please refer to it for detailed information.                                                                                                                                                                                                                                                                                                                                                                                  |
| Activity                | Measured by its binding ability in a functional ELISA. Immobilized human CD7-His at 10ug/ml (100ul/well) can bind biotinylated SECTM1-His. The EC50 of biotinylated SECTM1-His is 11-26ng/ml.                                                                                                                                                                                                                                                                                                                    |
| Preparation and Storage | <p>Samples are stable for up to twelve months from date of receipt at -20 degree C to -80 degree C. Store it under sterile conditions at -20 degree C to -80 degree C. It is recommended that the protein be aliquoted for optimal storage. Avoid repeated freeze-thaw cycles.</p> <p>In general, recombinant proteins are provided as lyophilized powder which are shipped at ambient temperature. Bulk packages of recombinant proteins are provided as frozen liquid. They are shipped out with blue ice.</p> |

IMAGES



SDS-PAGE

Application Data

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

ADDITIONAL INFORMATION

Related Product Information for CD7 active protein

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 associating 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 that 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.

References

Zola H, et al. (2007) CD molecules 2006-human cell differentiation molecules. J Immunol Methods. 318 (1-2): 1-5. Ho IC, et al. (2009) GATA3 and the T-cell lineage: essential functions before and after T-helper-2-cell differentiation. Nat Rev Immunol. 9 (2): 125-35. Matesanz-Isabel J, et al. (2011) New B-cell CD molecules. Immunology Letters. 134 (2): 104-12.

NCBI AND UNIPROT INFORMATION

|                                  |                                                                                                           |
|----------------------------------|-----------------------------------------------------------------------------------------------------------|
| NCBI GI #                        | 5453613                                                                                                   |
| NCBI GeneID                      | 924                                                                                                       |
| NCBI Accession #                 | NP_006128.1                                                                                               |
| NCBI GenBank Nucleotide #        | NM_006137.6                                                                                               |
| UniProt Accession #              | P09564                                                                                                    |
| Molecular Weight                 | 25,409 Da                                                                                                 |
| NCBI Official Full Name          | T-cell antigen CD7                                                                                        |
| NCBI Official Synonym Full Names | CD7 molecule                                                                                              |
| NCBI Official Symbol             | CD7                                                                                                       |
| NCBI Official Synonym Symbols    | GP40; TP41; Tp40; LEU-9                                                                                   |
| NCBI Protein Information         | T-cell antigen CD7; CD7 antigen (p41); T-cell leukemia antigen; T-cell surface antigen Leu-9; p41 protein |
| UniProt Protein Name             | T-cell antigen CD7                                                                                        |
| UniProt Gene Name                | CD7                                                                                                       |
| UniProt Entry Name               | CD7_HUMAN                                                                                                 |

**For Research Use Only.** Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://www.aaabiotech.com/hek293-active-protein/cd7/257959>