

CD2 active protein

CD2 Protein, Human, Recombinant (ECD, hFc Tag)

CATALOG #
AAA257956

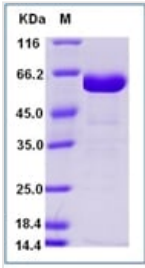
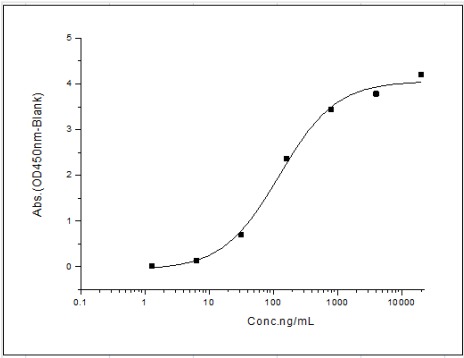
HOST
HEK293 Cells

PRODUCT SYNONYMS

CD2; CD2 Protein; Human; Recombinant (ECD; hFc Tag); Human CD2 Protein (Fc Tag); LFA-2 Protein; SRBC Protein; T11 Protein; CD2 molecule; CD2 active protein

PRODUCT SPECIFICATIONS

Host	HEK293 Cells
Purity/Purification	>90% 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-Asp209
Species	Human
Endotoxin	<1.0EU per ug protein as determined by the LAL method.
Predicted N Terminal	Lys 25
Tag	C-human IgG1-Fc
Protein Construction	A DNA sequence encoding the human CD2 (NP_001758.2)(Met1-Asp209) was expressed with the Fc region of human IgG1 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 CD58-His at 10ug/mL (100uL/well) can bind human CD2-Fc. The EC50 of human CD2-Fc is 100-350ng/mL.
Preparation and Storage	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. 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.



SDS-PAGE

Application Data

Measured by its binding ability in a functional ELISA. Immobilized human CD58-His at 10 ug/mL (100 uL/well) can bind human CD2-Fc, the EC50 of human CD2-Fc is 100-350 ng/mL.

ADDITIONAL INFORMATION

Related Product Information for CD2 active protein	Background: T-cell surface antigen CD2, also known as T-cell surface antigen T11/Leu-5, and SRBC, is a single-pass type I membrane protein. It contains one Ig-like C2-type domain and one Ig-like V-type domain. CD2 is a cell adhesion molecule expressed on T cells and is recognized as a target for CD48 (rats) and CD58 (humans). CD2 has been shown to set quantitative thresholds in T cell activation both in vivo and in vitro. Further, intracellular CD2 signaling pathways and networks are being discovered by the identification of several cytosolic tail binding proteins. CD2 interacts with lymphocyte function-associated antigen (LFA-3) and CD48/BCM1 to mediate adhesion between T-cells and other cell types. CD2 is implicated in the triggering of T-cells, the cytoplasmic domain of CD2 is implicated in the signaling function. The complex of CD2 and CD58 also plays an important role in enhancing the adhesion of T lymphocytes to target cells, and promoting hyperplasia and activation of T lymphocytes. As a cell surface glycoprotein, CD2 expressed on most human T cells and natural killer (NK) cells and plays an important role in mediating cell adhesion in both T-lymphocytes and in signal transduction.
References	Yang JJ, et al. (2001) Structural biology of the cell adhesion protein CD2: alternatively folded states and structure-function relation. Curr Protein Pept Sci. 2(1): 1-17. Wilkins AL, et al. (2003) Structural biology of the cell adhesion protein CD2: from molecular recognition to protein folding and design. Curr Protein Pept Sci. 4(5): 367-73. McNerney ME, et al. (2006) The CD2 family of natural killer cell receptors. Curr Top Microbiol Immunol. 298: 91-120.

NCBI AND UNIPROT INFORMATION

NCBI GI #	156071472
NCBI GeneID	914
NCBI Accession #	NP_001758.2
NCBI GenBank Nucleotide #	NM_001767.3
UniProt Accession #	P06729; Q96TE5
Molecular Weight	39,448 Da
NCBI Official Full Name	T-cell surface antigen CD2
NCBI Official Synonym Full Names	CD2 molecule
NCBI Official Symbol	CD2
NCBI Official Synonym Symbols	T11; SRBC; LFA-2
NCBI Protein Information	T-cell surface antigen CD2; CD2 antigen (p50), sheep red blood cell receptor; LFA-3 receptor; T-cell surface antigen T11/Leu-5; erythrocyte receptor; lymphocyte-function antigen-2; rosette receptor
UniProt Protein Name	T-cell surface antigen CD2

UniProt Gene Name	CD2
UniProt Synonym Gene Names	SRBC
UniProt Entry Name	CD2_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/cd2/257956>