

Recombinant Human CD2 Protein

Catalog No.: RP00241 **Recombinant**

Sequence Information

Species	Gene ID	Swiss Prot
Human	914	P06729

Tags

C-His

Synonyms

CD2;LFA-2;SRBC;T11

Product Information

Source	Purification
HEK293 cells	> 95% by SDS-PAGE.

Endotoxin

< 0.1 EU/μg of the protein by LAL method.

Formulation

Lyophilized from a 0.22 μm filtered solution of PBS, pH 7.4. Contact us for customized product form or formulation.

Reconstitution

Centrifuge the vial before opening. Reconstitute to a concentration of 0.1-0.5 mg/mL in sterile distilled water. Avoid vortex or vigorously pipetting the protein. For long term storage, it is recommended to add a carrier protein or stabilizer (e.g. 0.1% BSA, 5% HSA, 10% FBS or 5% Trehalose), and aliquot the reconstituted protein solution to minimize free-thaw cycles.

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). 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.

Basic Information

Description

Recombinant Human CD2 Protein is produced by HEK293 cells expression system. The target protein is expressed with sequence (Lys 25 - Asp 209) of human CD2 (Accession #NP_001758.2) fused with a 6xHis tag at the C-terminus.

Bio-Activity

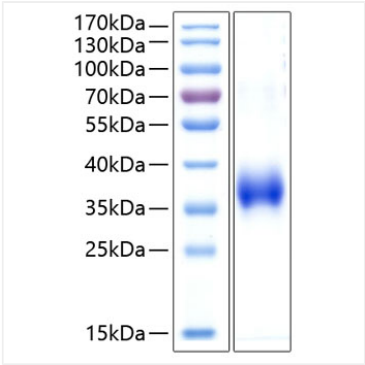
Measured by its binding ability in a functional ELISA. Immobilized Human CD2 at 2 μg/mL (100 μL/well) can bind Human CD58 with a linear range of 1.22-34.4 ng/mL.

Storage

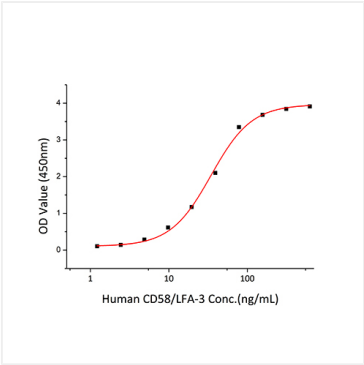
Store the lyophilized protein at -20°C to -80 °C for long term. After reconstitution, the protein solution is stable at -20 °C for 3 months, at 2-8 °C for up to 1 week. Avoid repeated freeze/thaw cycles.

Contact

Validation Data



Recombinant Human CD2 Protein was determined by SDS-PAGE with Coomassie Blue, showing a band at 37 kDa.



Immobilized Human CD2 at 2 µg/mL (100 µL/well) can bind Human CD58 with a linear range of 1.22-34.4 ng/mL.