

Synonym

CD2,SRBC,LFA-2,T11

Source

Human CD2, His Tag(CD2-H5226) is expressed from human 293 cells (HEK293). It contains AA Lys 25 - Asp 209 (Accession # AAH33583). Predicted N-terminus: Lys 25

Molecular Characterization

CD2(Lys 25 - Asp 209) AAH33583

Poly-his

This protein carries a polyhistidine tag at the C-terminus.

The protein has a calculated MW of 22.3 kDa. The protein migrates as 33-40 kDa when calibrated against <u>Star Ribbon Pre-stained Protein Marker</u> under reducing (R) condition (SDS-PAGE) due to glycosylation.

Endotoxin

Less than 1.0 EU per µg by the LAL method.

Purity

>95% as determined by SDS-PAGE.

>90% as determined by SEC-MALS.

Formulation

Lyophilized from 0.22 μm filtered solution in PBS, pH7.4 with trehalose as protectant.

Contact us for customized product form or formulation.

Reconstitution

Please see Certificate of Analysis for specific instructions.

For best performance, we strongly recommend you to follow the reconstitution protocol provided in the CoA.

Storage

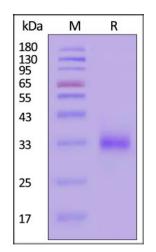
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

Please avoid repeated freeze-thaw cycles.

This product is stable after storage at:

- -20°C to -70°C for 12 months in lyophilized state;
- -70°C for 3 months under sterile conditions after reconstitution.

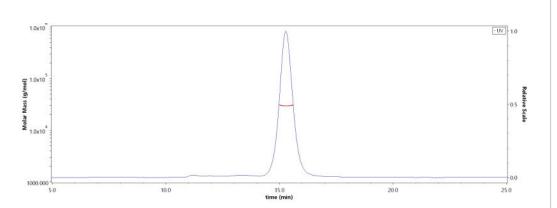
SDS-PAGE



Human CD2, His Tag on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 95% (With <u>Star Ribbon Pre-stained Protein Marker</u>).

Bioactivity-ELISA

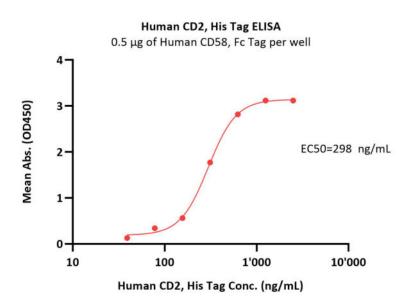
SEC-MALS



The purity of Human CD2, His Tag (Cat. No. CD2-H5226) is more than 90% and the molecular weight of this protein is around 23-35 kDa verified by SEC-MALS.

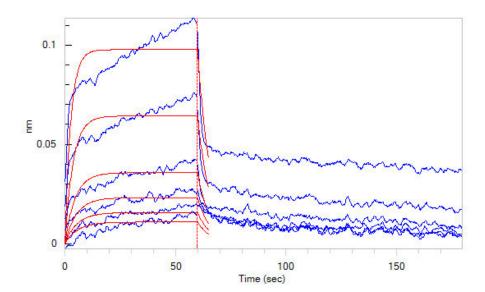
Report



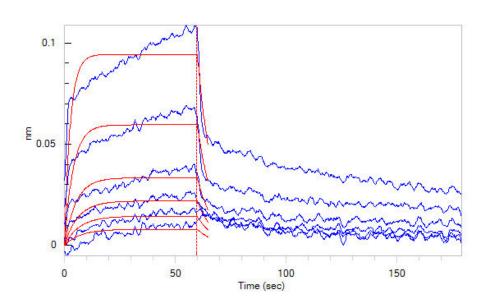


Immobilized Human CD58, Fc Tag (Cat. No. LF3-H5256) at 5 μ g/mL (100 μ L/well) can bind Human CD2, His Tag (Cat. No. CD2-H5226) with a linear range of 39-312 ng/mL (QC tested).

Bioactivity-BLI



Loaded bind Human CD58, Fc Tag (Cat. No. LF3-H5256) on Protein A Biosensor, can bind Human CD2, His Tag (Cat. No. CD2-H5226) with an affinity constant of 0.49 μ M as determined in BLI assay (ForteBio Octet Red96e) (Routinely tested).



Loaded bind Human CD58, Fc Tag (Cat. No. LF3-H5256) on AHC Biosensor, can bind Human CD2, His Tag (Cat. No. CD2-H5226) with an affinity constant of $0.57~\mu M$ as determined in BLI assay (ForteBio Octet Red96e) (Routinely tested).

Background

T-cell surface antigen CD2 is also known as Erythrocyte receptor, LFA-2, LFA-3 receptor, Rosette receptor, T-cell surface antigen T11/Leu-5 and SRBC, is a single-pass type I membrane protein found on the surface of T cells and natural killer (NK) cells. CD2 is a member of the immunoglobulin superfamily. CD2 / SRBC contains 1 Ig-like C2-type (immunoglobulin-like) domain and 1 Ig-like V-type (immunoglobulin-like) domain. CD2 / SRBC interacts with other adhesion molecules, such as lymphocyte function-associated antigen-3 (LFA-3 / CD58) in humans, or CD48 in rodents, which are expressed on the surfaces of other cells. In addition to its adhesive properties, CD2 also acts as a co-stimulatory molecule on T and NK cells. CD2 is a specific marker for T cells and NK cells, and can therefore be used in immunohistochemistry to identify the presence of such cells in tissue sections.

Clinical and Translational Updates

