Human CD2 / SRBC Protein, Fc Tag (MALS verified)

Catalog # CD2-H5258

Synonym

CD2,SRBC,LFA-2,T11

Source

Human CD2, Fc Tag(CD2-H5258) 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	Fc(Pro 100 - Lys 330) P01857

This protein carries a human IgG1 Fc tag at the C-terminus.

The protein has a calculated MW of 47.7 kDa. The protein migrates as 55-65 kDa under reducing (R) condition (SDS-PAGE) due to glycosylation.

Endotoxin

Less than 1.0 EU per μg by the LAL method / rFC method.

Purity

>95% as determined by SDS-PAGE.

>90% as determined by SEC-MALS.

Formulation

Lyophilized from 0.22 μm filtered solution in Tris with Glycine, Arginine and NaCl, pH7.5 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

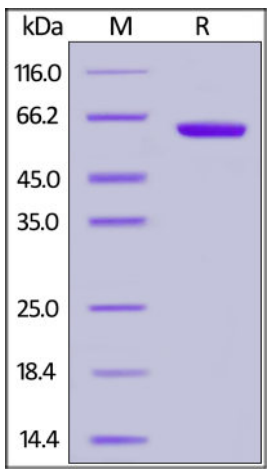
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

Please avoid repeated freeze-thaw cycles.

This product is stable after storage at:

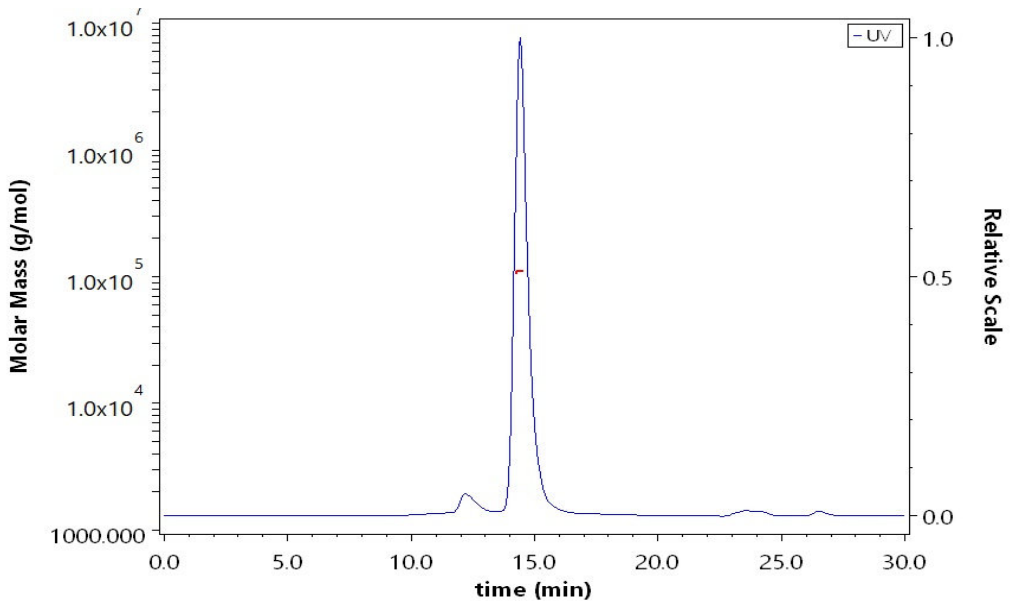
- -20°C to -70°C for 12 months in lyophilized state;
- -70°C for 3 months under sterile conditions after reconstitution.

SDS-PAGE



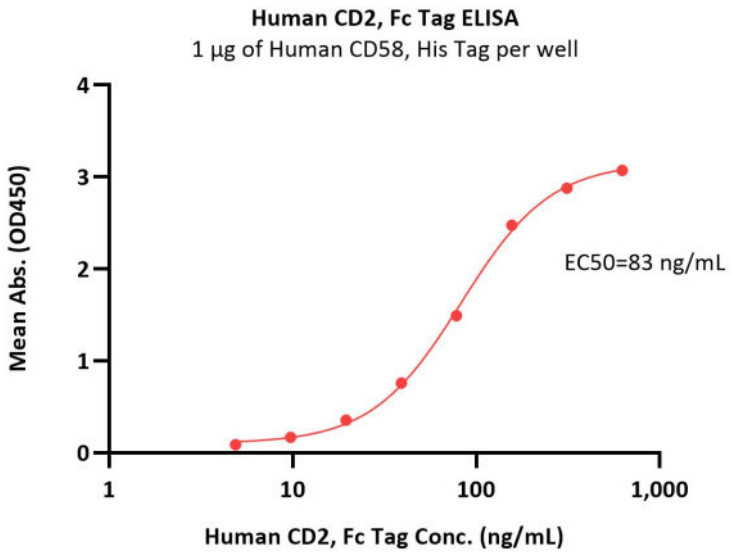
Human CD2, Fc Tag on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 95%.

SEC-MALS



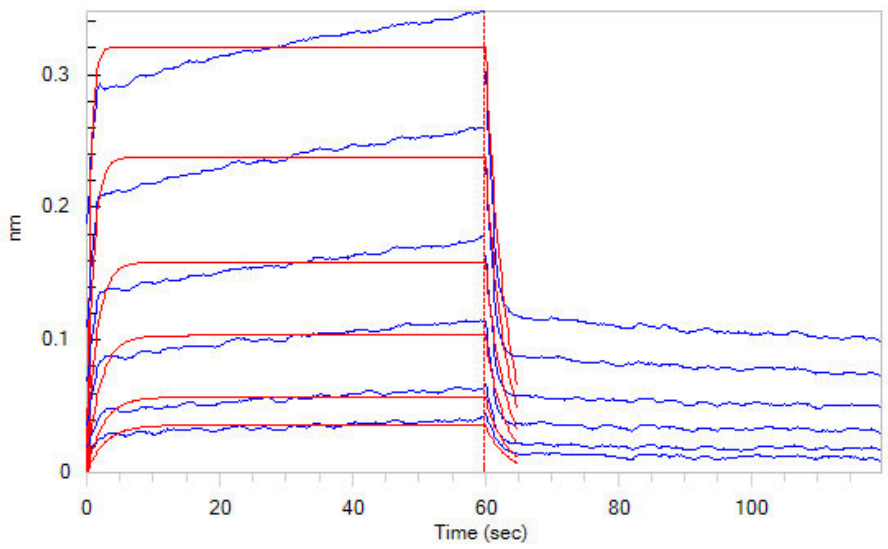
The purity of Human CD2, Fc Tag (Cat. No. CD2-H5258) is more than 90% and the molecular weight of this protein is around 100-130 kDa verified by SEC-MALS.
Report

Bioactivity-ELISA



Immobilized Human CD58, His Tag (Cat. No. LF3-H5225) at 10 μg/mL (100 μL/well) can bind Human CD2, Fc Tag (Cat. No. CD2-H5258) with a linear range of 5-156 ng/mL (QC tested).

Bioactivity-BLI



Loaded Human CD2, Fc Tag (Cat. No. CD2-H5258) on Protein A Biosensor, can bind Human CD58, His Tag (Cat. No. LF3-H5225) with an affinity constant of 2.3 μM 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.