

### Synonym

CD2,SRBC,LFA-2,T11

#### Source

Biotinylated Human CD2, His, Avitag(CD2-H82E6) 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 Avi

This protein carries a polyhistidine tag at the C-terminus, followed by an Avi tag (Avitag<sup>TM</sup>).

The protein has a calculated MW of 24.8 kDa. The protein migrates as 35-43 kDa under reducing (R) condition (SDS-PAGE) due to glycosylation.

### Labeling

Biotinylation of this product is performed using Avitag<sup>TM</sup> technology. Briefly, the single lysine residue in the Avitag is enzymatically labeled with biotin.

### **Protein Ratio**

Passed as determined by the HABA assay / binding ELISA.

# **Purity**

>95% as determined by SDS-PAGE.

### **Formulation**

Lyophilized from  $0.22~\mu m$  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**

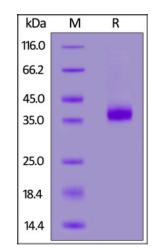
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

Please avoid repeated freeze-thaw cycles.

This product is stable after storage at:

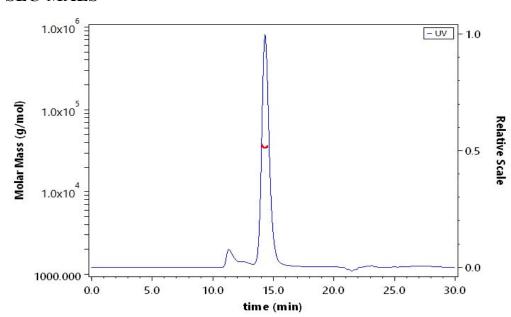
- -20°C to -70°C for 12 months in lyophilized state;
- -70°C for 3 months under sterile conditions after reconstitution.

# **SDS-PAGE**



Biotinylated Human CD2, His, Avitag 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 Biotinylated Human CD2, His, Avitag (Cat. No. CD2-H82E6) is more than 85% and the molecular weight of this protein is around 30-40 kDa verified by SEC-MALS.

<u>Report</u>

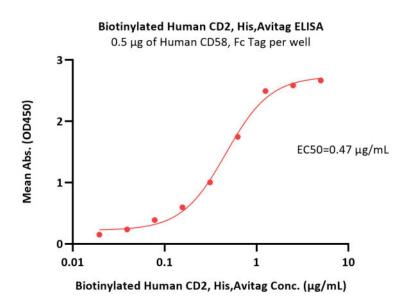
# **Bioactivity-ELISA**



# Biotinylated Human CD2 / SRBC Protein, His,Avitag™ (MALS verified)







Immobilized Human CD58, Fc Tag (Cat. No. LF3-H5256) at 5  $\mu$ g/mL (100  $\mu$ L/well) can bind Biotinylated Human CD2, His,Avitag (Cat. No. CD2-H82E6) with a linear range of 0.02-1.25  $\mu$ g/mL (QC 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.

