

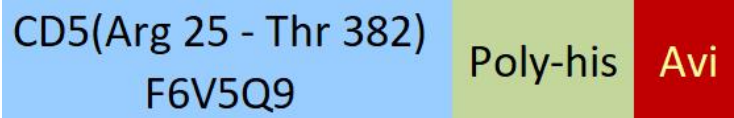
Synonym

CD5,LEU1

Source

Biotinylated Rhesus macaque CD5 Protein, His,Avitag(CD5-R82E3) is expressed from human 293 cells (HEK293). It contains AA Arg 25 - Thr 382 (Accession # [F6V5Q9](#)).
Predicted N-terminus: Arg 25

Molecular Characterization



This protein carries a polyhistidine tag at the C-terminus, followed by an Avi tag (Avitag™).
The protein has a calculated MW of 43 kDa. The protein migrates as 52-57 kDa when calibrated against [Star Ribbon Pre-stained Protein Marker](#) under reducing (R) condition (SDS-PAGE) due to glycosylation.

The protein is designed as a dimer.

Labeling

Biotinylation of this product is performed using Avitag™ 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

>90% 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.

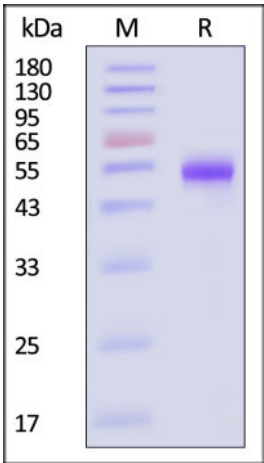
Storage

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:

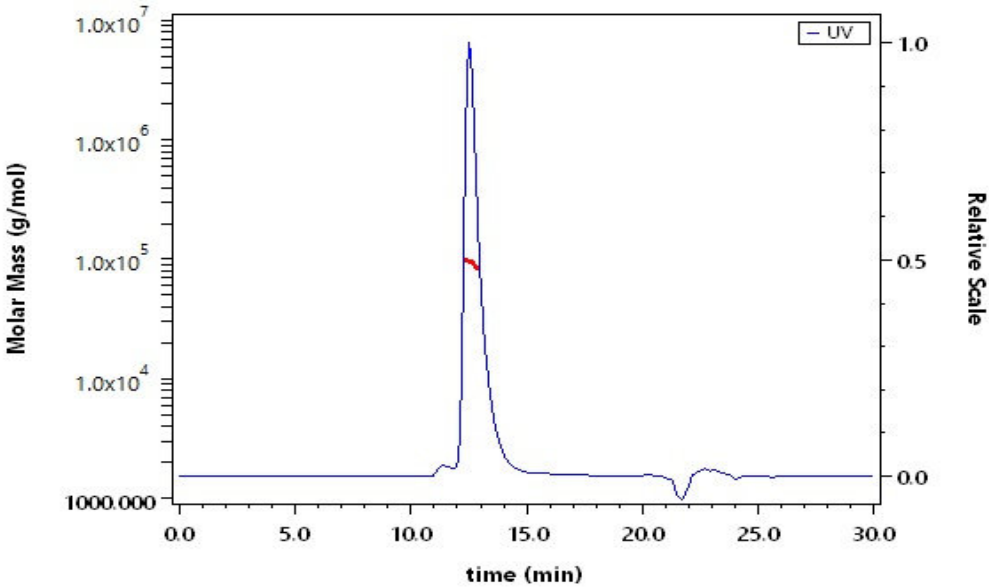
- 20°C to -70°C for 12 months in lyophilized state;
- 70°C for 3 months under sterile conditions after reconstitution.

SDS-PAGE



Biotinylated Rhesus macaque CD5 Protein, His,Avitag on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 90% (With [Star Ribbon Pre-stained Protein Marker](#)).

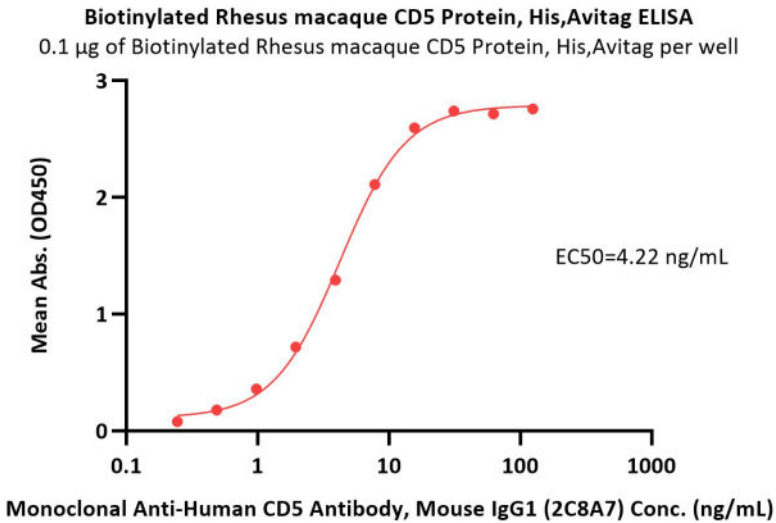
SEC-MALS



The purity of Biotinylated Rhesus macaque CD5 Protein, His,Avitag (Cat. No. CD5-R82E3) is more than 90% and the molecular weight of this protein is around 85-105 kDa verified by SEC-MALS.
[Report](#)

Bioactivity-ELISA





Immobilized Biotinylated Rhesus macaque CD5 Protein, His,Avitag (Cat. No. CD5-R82E3) at 1 µg/mL (100 µL/well) on streptavidin (Cat. No. STN-N5116) precoated (0.5 µg/well) plate can bind Monoclonal Anti-Human CD5 Antibody, Mouse IgG1 (2C8A7) with a linear range of 0.2-8 ng/mL (QC tested).

Background

T-cell surface glycoprotein CD5 is also known as Lymphocyte antigen T1/Leu-1 and LEU1, which is phosphorylated on tyrosine residues by LYN, so CD5 can create binding sites for PTPN6/SHP-1. CD5 may act as a receptor in regulating T-cell proliferation. CD5 is expressed at various developmental and activation stages on human B cells. CD5 is a well established negative regulator of TCR and BCR signalling. CD5-positive cells may also prevent the emergence of autoimmunity by provision of cytokines such as IL-10. Development, selection and function of different B- and T-cell subsets or their preferential survival may be directly or indirectly dependent on different glycan structures associated with CD5 or CD5-like molecules.

