

Synonym

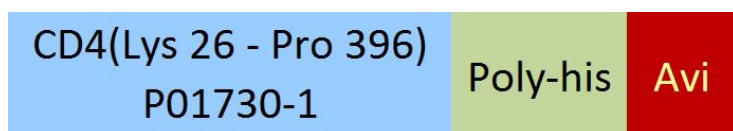
CD4,CD4mut,LEU3

Source

Biotinylated Human CD4, His,Avitag(CD4-H82E8) is expressed from human 293 cells (HEK293). It contains AA Lys 26 - Pro 396 (Accession # [P01730-1](#)).

Predicted N-terminus: Lys 26

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 45.0 kDa. The protein migrates as 55-60 kDa under reducing (R) condition (SDS-PAGE) due to glycosylation.

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.

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

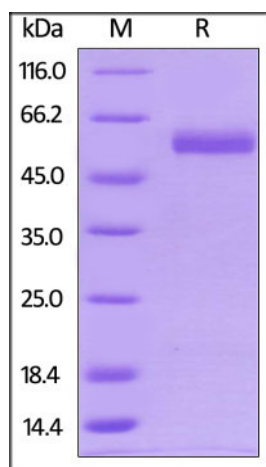
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

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.

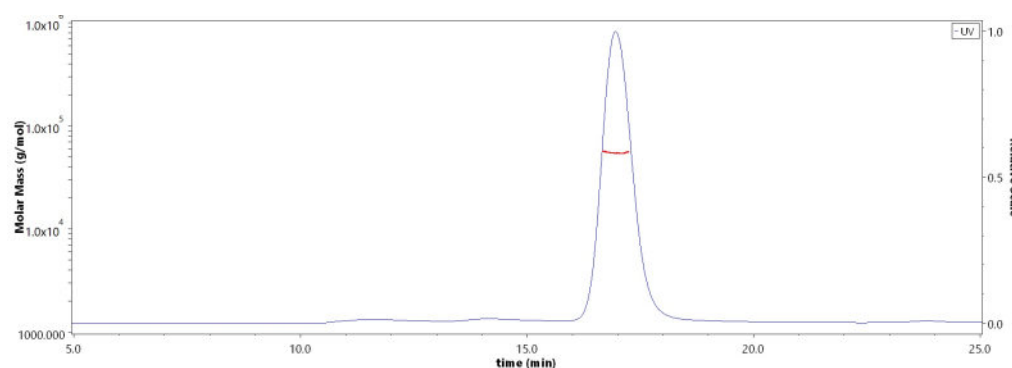
SDS-PAGE



Biotinylated Human CD4, His,Avitag on SDS-PAGE under reducing (R) condition. The gel was stained overnight with Coomassie Blue. The purity of the protein is greater than 95%.

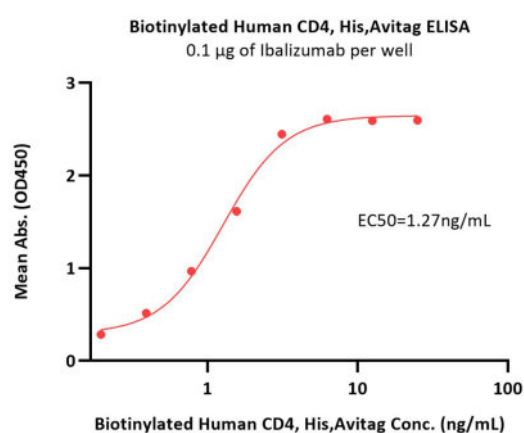
Bioactivity-ELISA

SEC-MALS

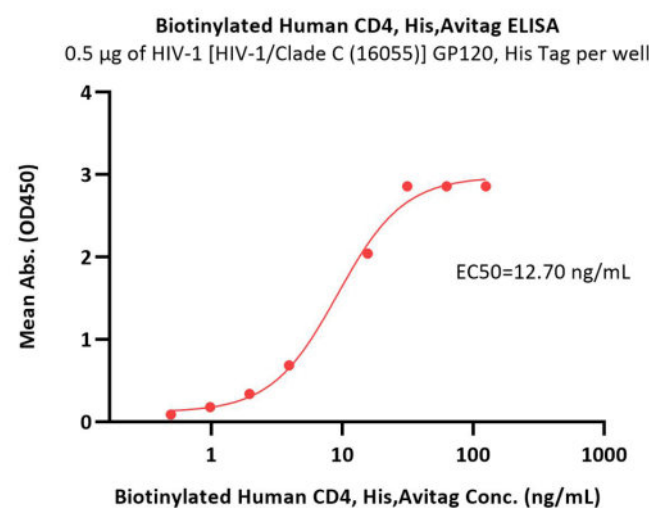


The purity of Biotinylated Human CD4, His,Avitag (Cat. No. CD4-H82E8) is more than 90% and the molecular weight of this protein is around 50-60 kDa verified by SEC-MALS.

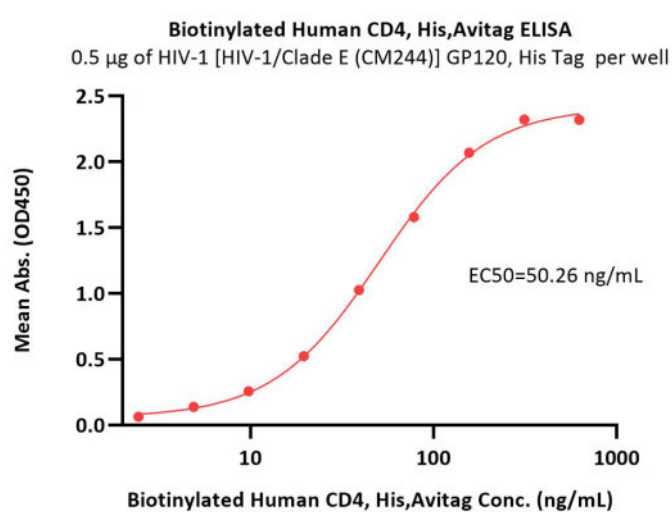
[Report](#)



Immobilized Ibalizumab at 1 µg/mL (100 µL/well) can bind Biotinylated Human CD4, His,Avitag (Cat. No. CD4-H82E8) with a linear range of 0.2-3 ng/mL (QC tested).



Immobilized HIV-1 [HIV-1/Clade C (16055)] GP120, His Tag (Cat. No. GP5-V15224) at 5 µg/mL (100 µL/well) can bind Biotinylated Human CD4, His,Avitag (Cat. No. CD4-H82E8) with a linear range of 1-16 ng/mL (Routinely tested).



Immobilized HIV-1 [HIV-1/Clade E (CM244)] GP120, His Tag (Cat. No. GP4-V15223) at 5 µg/mL (100 µL/well) can bind Biotinylated Human CD4, His,Avitag (Cat. No. CD4-H82E8) with a linear range of 2-78 ng/mL (Routinely tested).

Background

T-cell surface glycoprotein CD4 is also known as T-cell surface antigen T4/Leu-3. CD4 contains three Ig-like C2-type (immunoglobulin-like) domains and one Ig-like V-type (immunoglobulin-like) domain. CD4 is accessory protein for MHC class-II antigen/T-cell receptor interaction. CD4 induces the aggregation of lipid rafts. CD4 is a primary receptor used by HIV-1 to gain entry into host T cells. HIV infection leads to a progressive reduction of the number of T cells possessing CD4 receptors. Therefore, medical professionals refer to the CD4 count to decide when to begin treatment for HIV-infected patients.

Clinical and Translational Updates

Please contact us via TechSupport@acrobiosystems.com if you have any question on this product.