

Synonym

CD4,CD4mut,LEU3

Source

Human CD4, His Tag(LE3-H5228) is expressed from human 293 cells (HEK293). It contains AA Lys 26 - Trp 390 (Accession # <u>AAH25782</u>). Predicted N-terminus: Lys 26

Molecular Characterization

CD4(Lys 26 - Trp 390) AAH25782

Poly-his

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

The protein has a calculated MW of 41.5 kDa. The protein migrates as 47-54 kDa when calibrated against <u>Star Ribbon Pre-stained Protein Marker</u> under reducing (R) condition (SDS-PAGE) due to glycosylation.

Endotoxin

Less than 0.1 EU per µg by the LAL method.

Purity

>90% as determined by SDS-PAGE.

>95% 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

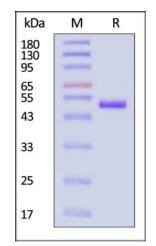
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

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.

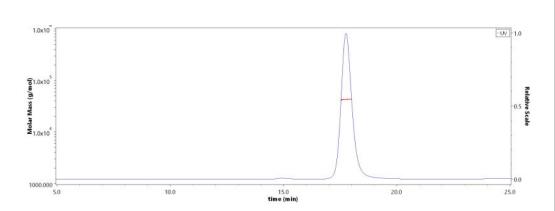
SDS-PAGE



Human CD4, His Tag on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 90% (With <u>Star Ribbon Pre-stained Protein Marker</u>).

Bioactivity-ELISA

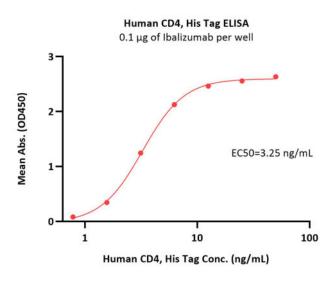
SEC-MALS

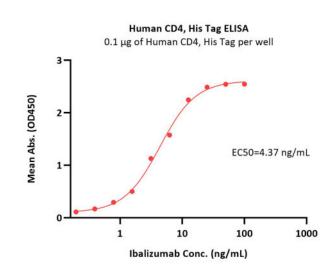


The purity of Human CD4, His Tag (Cat. No. LE3-H5228) is more than 95% and the molecular weight of this protein is around 40-50 kDa verified by SEC-MALS.

Report

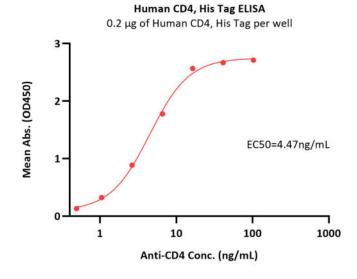






Immobilized Ibalizumab at 1 μ g/mL (100 μ L/well) can bind Human CD4, His Tag (Cat. No. LE3-H5228) with a linear range of 0.8-6 ng/mL (QC tested).

Immobilized Human CD4, His Tag (Cat. No. LE3-H5228) at 1 μ g/mL (100 μ L/well) can bind Ibalizumab with a linear range of 0.2-13 ng/mL (Routinely tested).



Immobilized Human CD4, His Tag (Cat. No. LE3-H5228) at 2 μ g/mL (100 μ L/well) can bind Anti-CD4 with a linear range of 0.4-7 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

