

Synonym

CD5,LEU1

Source

FITC-Labeled Human CD5, Fc Tag(CD5-HF255) is expressed from human 293 cells (HEK293). It contains AA Arg 25 - Pro 372 (Accession # [P06127-1](#)).

Predicted N-terminus: Arg 25

Molecular Characterization

CD5(Arg 25 - Pro 372) P06127-1	Fc(Pro 100 - Lys 330) P01857
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This protein carries a human IgG1 Fc tag at the C-terminus.

The protein has a calculated MW of 65.1 kDa. The protein migrates as 75-95 kDa and >116 kDa under reducing (R) condition (SDS-PAGE) due to glycosylation.

Conjugate

FITC

Excitation source: 488 nm spectral line, argon-ion laser

Excitation Wavelength: 488 nm

Emission Wavelength: 535 nm

Labeling

*The primary amines in the side chains of lysine residues and the N-terminus of the protein are conjugated with FITC using standard chemical labeling method. The residual FITC is removed by molecular sieve treatment during purification process.*

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

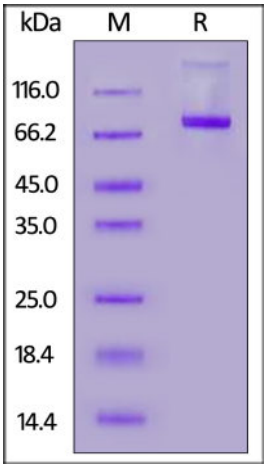
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

*Please protect from light and avoid repeated freeze-thaw cycles.*

This product is stable after storage at:

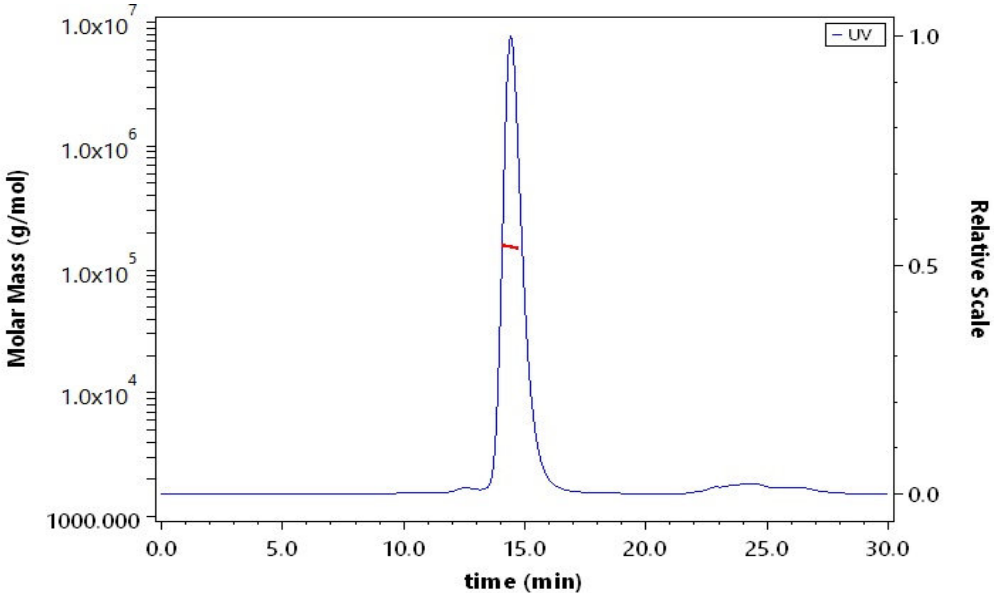
- 20°C to -70°C for 12 months in lyophilized state;
- 70°C for 3 months under sterile conditions after reconstitution.

SDS-PAGE



FITC-Labeled Human CD5, Fc Tag on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 90%.

SEC-MALS

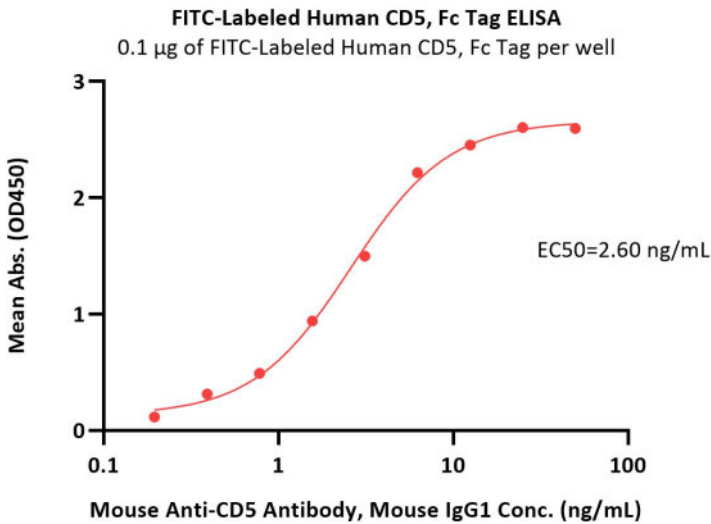


The purity of FITC-Labeled Human CD5, Fc Tag (Cat. No. CD5-HF255) is more than 90% and the molecular weight of this protein is around 135-165 kDa



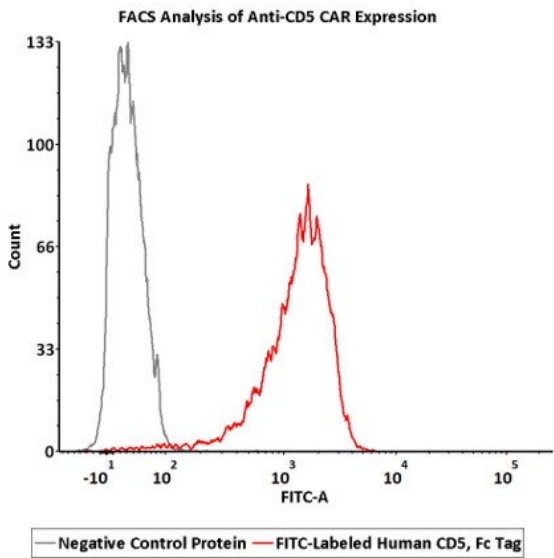
verified by SEC-MALS.  
[Report](#)

Bioactivity-ELISA



Immobilized FITC-Labeled Human CD5, Fc Tag (Cat. No. CD5-HF255) at 1 µg/mL (100 µL/well) can bind Mouse Anti-CD5 Antibody, Mouse IgG1 with a linear range of 0.2-3 ng/mL (QC tested).

Bioactivity-FACS



5e5 of Anti-CD5 CAR-293 cells were stained with 100 µL of 3 µg/mL of FITC-Labeled Human CD5, Fc Tag (Cat. No. CD5-HF255) and negative control protein respectively. FITC signal was used to evaluate the binding activity (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.

