

Synonym

CD58,LFA3,Ag3

Source

Human CD58, Fc Tag(LF3-H5256) is expressed from human 293 cells (HEK293). It contains AA Phe 29 - Arg 215 (Accession # <u>AAH05930</u>). Predicted N-terminus: Phe 29

Molecular Characterization

CD58(Phe 29 - Arg 215) Fc(Pro 100 - Lys 330)
AAH05930 P01857

This protein carries a human IgG1 Fc tag at the C-terminus.

The protein has a calculated MW of 48.1 kDa. The protein migrates as 60-70 kDa under reducing (R) condition, and 150 kDa when calibrated against <u>Star Ribbon Pre-stained Protein Marker</u> under non-reducing (NR) condition (SDS-PAGE) due to different glycosylation.

Endotoxin

Less than 1.0 EU per µg by the LAL method.

Purity

>95% as determined by SDS-PAGE.

Formulation

Lyophilized from 0.22 µm filtered solution in

Tris with Glycine, Arginine and NaCl, pH7.5 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

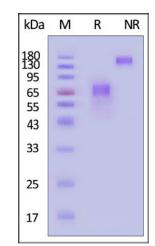
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

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

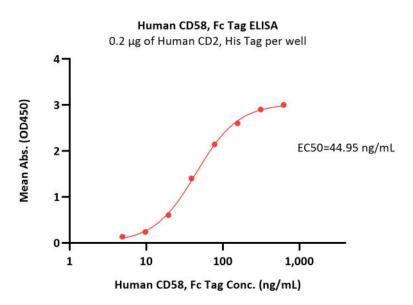


Human CD58, Fc Tag on SDS-PAGE under reducing (R) and non-reducing (NR) conditions. The gel was stained with Coomassie Blue. The purity of the protein is greater than 95% (With <u>Star Ribbon Pre-stained Protein Marker</u>).

Bioactivity-ELISA

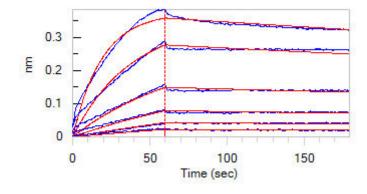






Immobilized Human CD2, His Tag (Cat. No. CD2-H5226) at 2 μ g/mL (100 μ L/well) can bind Human CD58, Fc Tag (Cat. No. LF3-H5256) with a linear range of 10-78 ng/mL (QC tested).

Bioactivity-BLI



Loaded bind Human CD58, Fc Tag (Cat. No. LF3-H5256) on Protein A Biosensor, can bind Human CD2, His Tag (Cat. No. CD2-H5226) with an affinity constant of 8.42 nM as determined in BLI assay (ForteBio Octet Red96e) (Routinely tested).

Background

CD antigen CD58 is also known as Lymphocyte function-associated antigen 3 (LFA-3). CD58 is a cell adhesion molecule expressed on Antigen Presenting Cells (APC), particularly macrophages. CD58 /LFA3 is ligand of the T-lymphocyte CD2 glycoprotein, which binds to CD2 (LFA-2) [3] on T cells and is important in strengthening the adhesion between the T cells and Professional Antigen Presenting Cells. In addition, the LFA-3/CD2 interaction may prime response by both the CD2+ and LFA-3+ cells. Polymorphisms in the CD58 gene are associated with increased risk for multiple sclerosis.

Clinical and Translational Updates

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

