

Synonym

CD38,T10,cADPr hydrolase 1

Source

Human CD38, Fc Tag(CD8-H5255) is expressed from human 293 cells (HEK293). It contains AA Val 43 - Ile 300 (Accession # [P28907-1](#)).

Predicted N-terminus: Val 43

Molecular Characterization

CD38(Val 43 - Ile 300) P28907-1	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 56.5 kDa. The protein migrates as 66-70 kDa when calibrated against [Star Ribbon Pre-stained Protein Marker](#) under reducing (R) condition (SDS-PAGE) due to glycosylation.

Endotoxin

Less than 0.1 EU per µg by the LAL method / rFC method.

Purity

>95% as determined by SDS-PAGE.

>95% as determined by SEC-MALS.

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

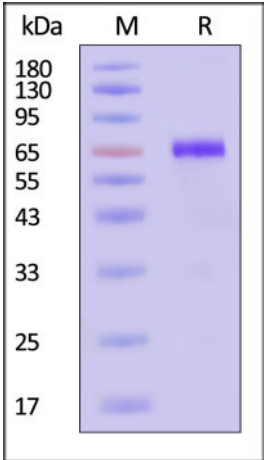
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

Please avoid repeated freeze-thaw cycles.

This product is stable after storage at:

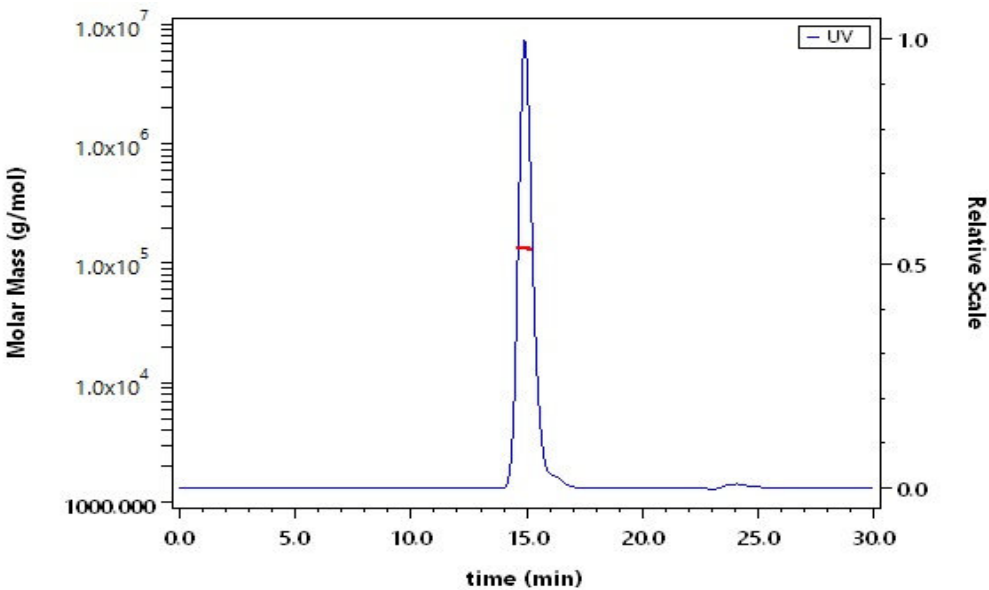
- 20°C to -70°C for 12 months in lyophilized state;
- 70°C for 3 months under sterile conditions after reconstitution.

SDS-PAGE



Human CD38, Fc Tag on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 95% (With [Star Ribbon Pre-stained Protein Marker](#)).

SEC-MALS

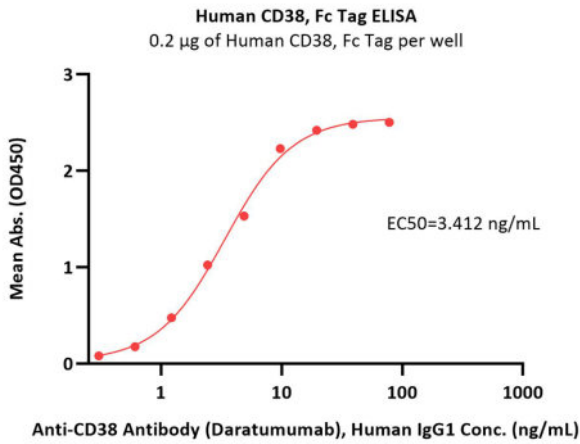


The purity of Human CD38, Fc Tag (Cat. No. CD8-H5255) is more than 95% and the molecular weight of this protein is around 115-145 kDa verified by SEC-MALS.

[Report](#)

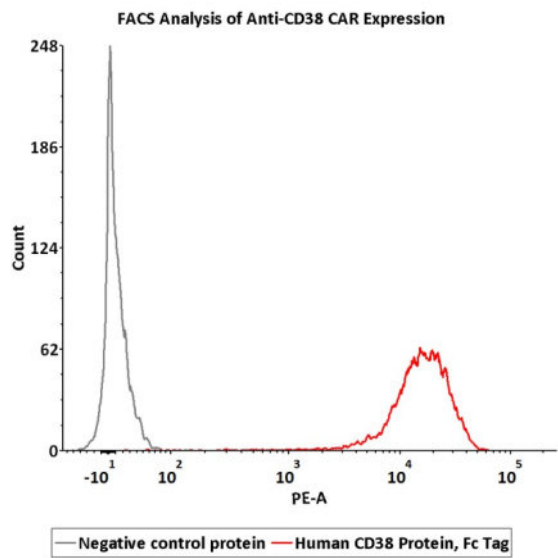
Bioactivity-ELISA





Immobilized Human CD38, Fc Tag (Cat. No. CD8-H5255) at 2 µg/mL (100 µL/well) can bind Anti-CD38, Human IgG1 with a linear range of 0.3-10 ng/mL (QC tested).

Bioactivity-FACS



2e5 of Anti-CD38 CAR-293 cells were stained with 100 µL of 3 µg/mL of Human CD38 Protein, Fc Tag (Cat. No. CD8-H5255) and negative control protein respectively, washed and then followed by PE anti-human IgG Fc antibody and analyzed with FACS (Routinely tested).

Background

CD antigen CD38 is also known as ADP-ribosyl cyclase 1, which belongs to the ADP-ribosyl cyclase family. CD38 is expressed at high levels in pancreas, liver, kidney, brain, testis, ovary, placenta, malignant lymphoma and neuroblastoma. CD38 is a multifunctional ectoenzyme that catalyzes the synthesis and hydrolysis of cyclic ADP-ribose (cADPR) from NAD⁺ to ADP-ribose. These reaction products are essential for the regulation of intracellular Ca²⁺. The loss of CD38 function is associated with impaired immune responses, metabolic disturbances, and behavioral modifications. The CD38 protein is a marker of cell activation. It has been connected to HIV infection, leukemias, myelomas, solid tumors, type II diabetes mellitus and bone metabolism. CD38 has been used as a prognostic marker in leukemia.

