



## 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) Fc(Pro 100 - Lys 330)
P28907-1 P01857

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 <u>Star Ribbon Pre-stained Protein Marker</u> under reducing (R) condition (SDS-PAGE) due to glycosylation.

#### Endotoxin

Less than 0.1 EU per  $\mu g$  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

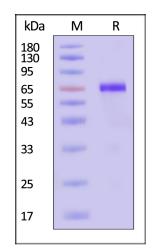
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

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.

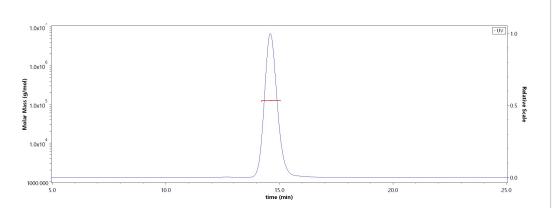
## **SDS-PAGE**



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).

# **Bioactivity-ELISA**

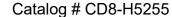
## **SEC-MALS**



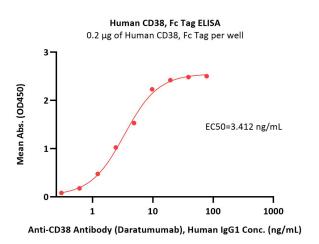
The purity of Human CD38, Fc Tag (Cat. No. CD8-H5255) is more than 95% and the molecular weight of this protein is around 115-145 kDa verified by SEC-MALS.

Report

# **Human CD38 Protein, Fc Tag (MALS verified)**







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

