

**Synonym**

CD38,T10,cADPr hydrolase 1

**Source**

Human CD38 Protein, Llama IgG2b Fc Tag(CD8-H5252) 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	LlamaFc(Glu1 - Ser243) AAX73259.1
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This protein carries a llama IgG2b Fc tag at the C-terminus

The protein has a calculated MW of 57.7 kDa. The protein migrates as 66-90 kDa under reducing (R) condition (SDS-PAGE) due to glycosylation.

**Endotoxin**

Less than 0.01 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.*

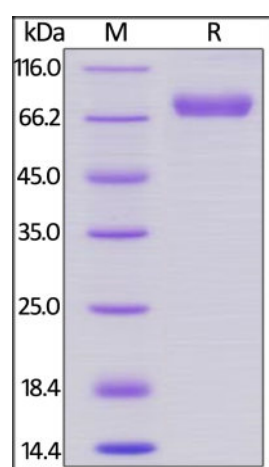
**Storage**

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

*Please avoid repeated freeze-thaw cycles.*

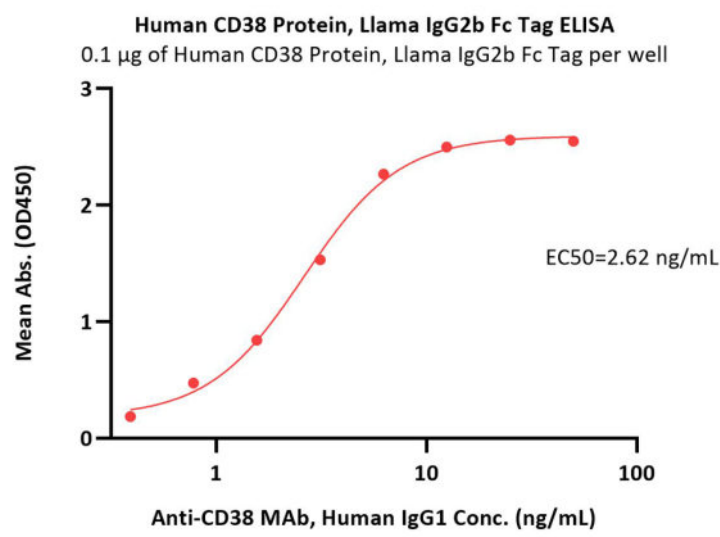
This product is stable after storage at:

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

**SDS-PAGE**

Human CD38 Protein, Llama IgG2b 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%.

**Bioactivity-ELISA**



Immobilized Human CD38 Protein, Llama IgG2b Fc Tag (Cat. No. CD8-H5252) at 1 µg/mL (100 µL/well) can bind Anti-CD38 MAb, Human IgG1 with a linear range of 0.4-6 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<sup>+</sup> to ADP-ribose. These reaction products are essential for the regulation of intracellular Ca<sup>2+</sup>. 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.

## Clinical and Translational Updates

Please contact us via [TechSupport@acrobiosystems.com](mailto:TechSupport@acrobiosystems.com) if you have any question on this product.