

Human CD38 Protein, Llama IgG2b Fc Tag, low endotoxin

Catalog # CD8-H5252

For Research Use Only

Description

Source Human CD38, Llama IgG2b Fc Tag, low endotoxin (CD8-H5252) is expressed from human 293 cells (HEK293). It contains AA Val 43 - Ile 300 (Accession # P28907-1). Predicted N-terminus: Val 43

Predicted N-terminus Val 43

Protein Structure

CD38(Val 43 - Ile 300) P28907-1	LlamaFc(Glu1 - Ser243) AAX73259.1
------------------------------------	--------------------------------------

Molecular Characterization 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.

Bioactivity Measured by its binding ability in a functional ELISA. Immobilized Human CD38, Llama IgG2b Fc Tag, low endotoxin (Cat. No. CD8-H5252) at 1 µg/mL (100 µL/well) can bind Daratumumab with a linear range of 0.4-6 ng/mL (QC tested).

Formulation and Storage

Formulation Lyophilized from 0.22 µm filtered solution in 50 mM Tris, 100 mM Glycine, pH7.5. Normally trehalose is added as protectant before lyophilization.

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.

No activity loss was observed after storage at:

- 4-8°C for 12 months in lyophilized state;
- -70°C for 3 months under sterile conditions after reconstitution.

Background

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.

References (1) Orciani M., et al., 2008, J. Cell. Biochem. 105 (3): 905–12.

(2) Nata K., et al., 1997, Gene 186 (2): 285–92.

(3) Malavasi F., et al., 2008, Physiol. Rev. 88 (3): 841–86.

Please contact us at TechSupport@acrobiosystems.com, if you have any questions about this product.

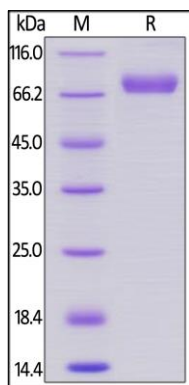
Human CD38 Protein, Llama IgG2b Fc Tag, low endotoxin

Catalog # CD8-H5252

For Research Use Only

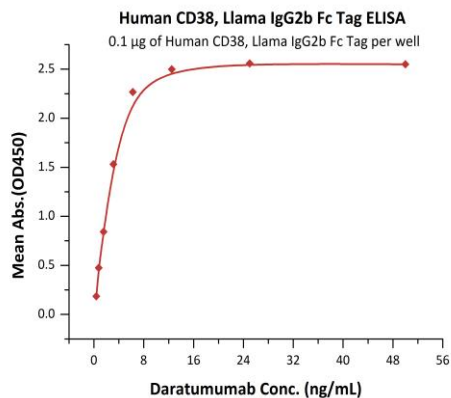
Assay Data

SDS-PAGE Data



Human CD38, Llama IgG2b Fc Tag, low endotoxin on SDS-PAGE under reducing (R) condition. The gel was stained overnight with Coomassie Blue. The purity of the protein is greater than 95%.

Bioactivity Data



Immobilized Human CD38, Llama IgG2b Fc Tag, low endotoxin (Cat. No. CD8-H5252) at 1 µg/mL (100 µL/well) can bind Daratumumab with a linear range of 0.4-6 ng/mL (QC tested).

Please note that there may be a cross-reaction between anti-human IgG Fc antibodies and llama IgG Fc tag, also between anti-llama IgG Fc antibodies and human IgG Fc tag.