

Synonym

CD39,ENTPD1,NTPDase 1,Entpd1,Ecto-ATPDase 1,Ecto-ATPase 1

Source

Human CD39, Mouse IgG2a Fc Tag(CD9-H5253) is expressed from human 293 cells (HEK293). It contains AA Thr 38 - Val 478 (Accession # [P49961-1](#)).

Molecular Characterization

CD39(Thr 38 - Val 478) P49961-1	mFc(Glu 98 - Lys 330) P01863
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This protein carries a mouse IgG2a Fc tag at the C-terminus

The protein has a calculated MW of 77.3 kDa. The protein migrates as 95-110 kDa under reducing (R) condition (SDS-PAGE) due to glycosylation.

Endotoxin

Less than 0.1 EU per µg by the LAL method.

Purity

>95% as determined by SDS-PAGE.

Formulation

Supplied as 0.2 µm filtered solution in 20 mM Tris, 500 mM Arginine, 150 mM NaCl, pH7.5 with trehalose as protectant.

Contact us for customized product form or formulation.

Shipping

This product is supplied and shipped with dry ice, please inquire the shipping cost.

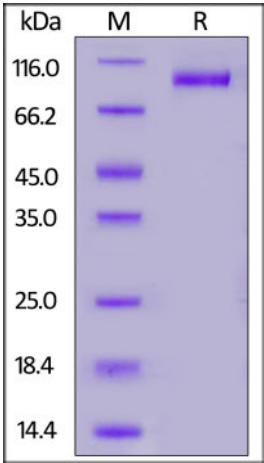
Storage

Please avoid repeated freeze-thaw cycles.

This product is stable after storage at:

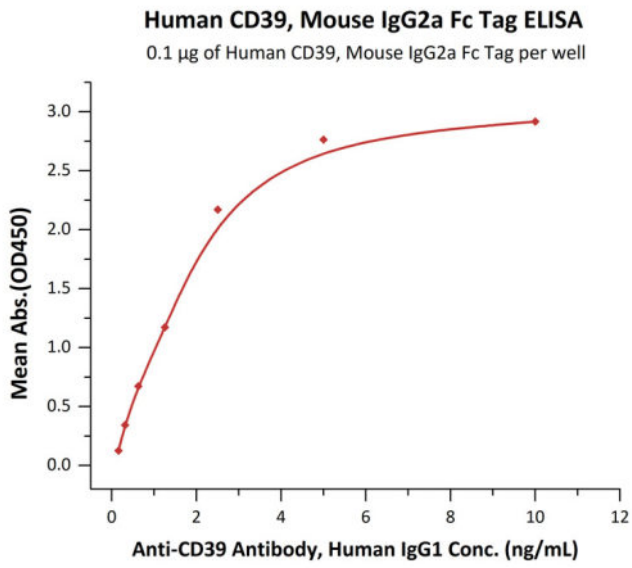
- The product MUST be stored at -70°C or lower upon receipt;
- -70°C for 3 months under sterile conditions.

SDS-PAGE



Human CD39, Mouse IgG2a 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 CD39, Mouse IgG2a Fc Tag (Cat. No. CD9-H5253) at 1 µg/mL (100 µL/well) can bind Anti-CD39 Antibody, Human IgG1 with a linear range of 0.078-2.5 ng/mL (QC tested).

Bioactivity

Measured by its ability to hydrolyze the 5’-phosphate group from the substrate adenosine-5’-triphosphate (ATP). The specific activity is > 800 pmol/min/µg (QC tested).

Background

CD39 is also known as Ectonucleoside triphosphate diphosphohydrolase 1, ENTPD1, NTPDase 1, Ecto-ATPDase 1, in the nervous system, could hydrolyze ATP and other nucleotides to regulate purinergic neurotransmission. Could also be implicated in the prevention of platelet aggregation by hydrolyzing platelet-activating ADP to AMP. Hydrolyzes ATP and ADP equally well. NTPDase-1 was originally described as CD39, a B lymphocyte cell surface marker, but it is also present on the surface of natural killer cells, T cells, and some endothelial cells.Regulatory T cells(Tregs) mediate immunosuppression through multiple, non-redundant, cell-contact dependent and independent mechanisms, a growing body of evidence suggests an important role for the CD39-CD73-adenosine pathway. CD39 ectonucleotidase is the rate-limiting enzyme of a cascade leading to the generation of suppressive adenosine that alters CD4 and CD8 T cell and natural killer cell antitumor activities.

Clinical and Translational Updates

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