Cynomolgus CD39 Protein, His Tag (active enzyme, MALS verified)

Catalog # CD9-C5PH3

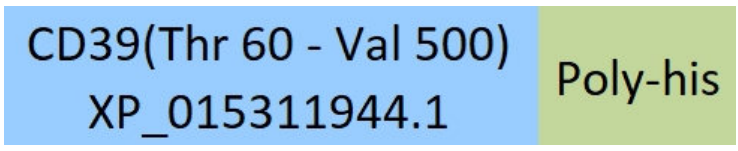
Synonym

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

Source

Cynomolgus CD39 Protein, His Tag(CD9-C5PH3) is expressed from CHO cells. It contains AA Thr 60 - Val 500 (Accession # XP_015311944.1).

Molecular Characterization



This protein carries a polyhistidine tag at the C-terminus.

The protein has a calculated MW of 52.3 kDa. The protein migrates as 65-80 kDa when calibrated against Star Ribbon Pre-stained Protein Marker under reducing (R) condition (SDS-PAGE) due to glycosylation.

Endotoxin

Less than 1.0 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, 150 mM NaCl, 20% Glycerol, pH8.0 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.

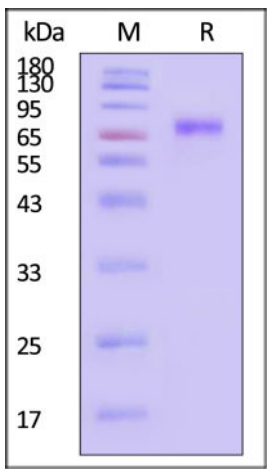
Storage

Please avoid repeated freeze-thaw cycles.

This product is stable after storage at:

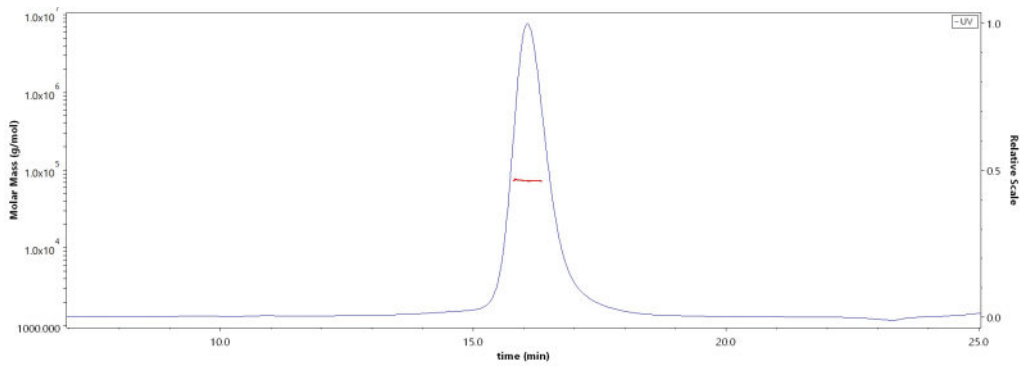
- The product MUST be stored at -70°C or lower upon receipt;
- -70°C for 3 months under sterile conditions.

SDS-PAGE



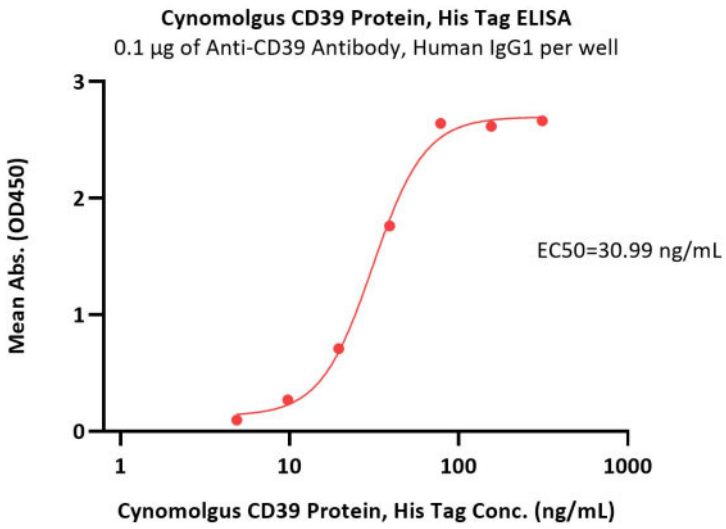
Cynomolgus CD39 Protein, His Tag on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 95% (With Star Ribbon Pre-stained Protein Marker).

SEC-MALS

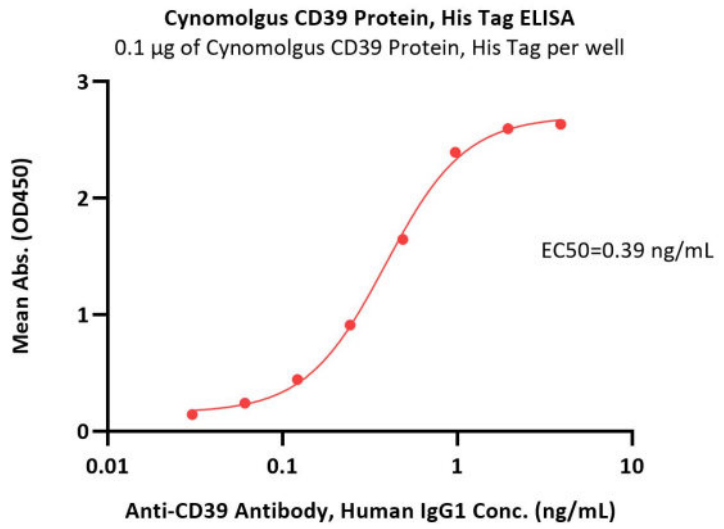


The purity of Cynomolgus CD39 Protein, His Tag (Cat. No. CD9-C5PH3) is more than 85% and the molecular weight of this protein is around 65-85 kDa verified by SEC-MALS.
Report

Bioactivity-ELISA



Immobilized Anti-CD39 Antibody, Human IgG1 at 1 μg/mL (100 μL/well) can bind Cynomolgus CD39 Protein, His Tag (Cat. No. CD9-C5PH3) with a linear range of 5-78 ng/mL (QC tested).



Immobilized Cynomolgus CD39 Protein, His Tag (Cat. No. CD9-C5PH3) at 1 μg/mL (100 μL/well) can bind Anti-CD39 Antibody, Human IgG1 with a linear range of 0.03-1 ng/mL (Routinely tested).

Bioactivity

Measured by its ability to hydrolyze the 5’-phosphate group from the substrate adenosine-5’-triphosphate (ATP). The specific activity is > 15,000 pmol/min/μg (QC tested).

Background

CD39L1, also known as ENTPD2 and NTPDase2, is an ectonucleotidase belonging to the CD39 family. It is found on the surface of vascular adventitial cells and accessory vascular cells . CD39L1 is a Ca2+ and Mg2+ dependent enzyme that hydrolyze ATP and other nucleotides to regulate purinergic neurotransmission. Hydrolyzes ADP only to a marginal extent. The order of activity with different substrates is ATP > GTP > CTP = ITP > UTP >> ADP = UDP. CD39L1 plays a role in regulating thrombosis and inflammation . It is considered to be a therapeutic target for thromboregulation and the treatment of vascular inflammation.

Clinical and Translational Updates