Cynomolgus CD38 Protein, His Tag

Catalog # CD8-C5223

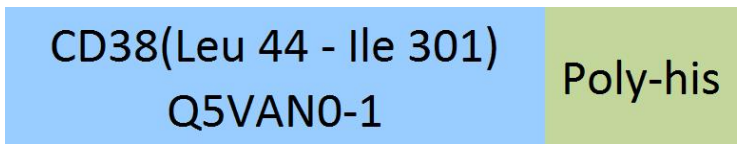
Synonym

CD38,T10,cADPr hydrolase 1

Source

Cynomolgus CD38, His Tag(CD8-C5223) is expressed from human 293 cells (HEK293). It contains AA Leu 44 - Ile 301 (Accession # Q5VAN0-1).
Predicted N-terminus: Leu 44

Molecular Characterization



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

The protein has a calculated MW of 31.8 kDa. The protein migrates as 38-45 kDa under reducing (R) condition (SDS-PAGE) due to glycosylation.

Endotoxin

Less than 1.0 EU per μg by the LAL method / rFC method.

Purity

>95% as determined by SDS-PAGE.

Formulation

Lyophilized from 0.22 μm filtered solution in 50 mM MES, 100 mM NaCl, pH6.5 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

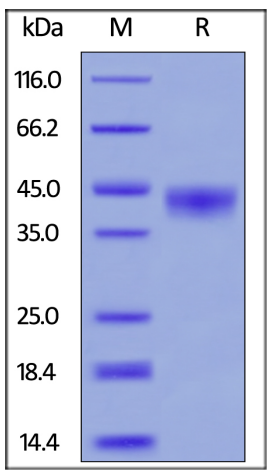
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

Please avoid repeated freeze-thaw cycles.

This product is stable after storage at:

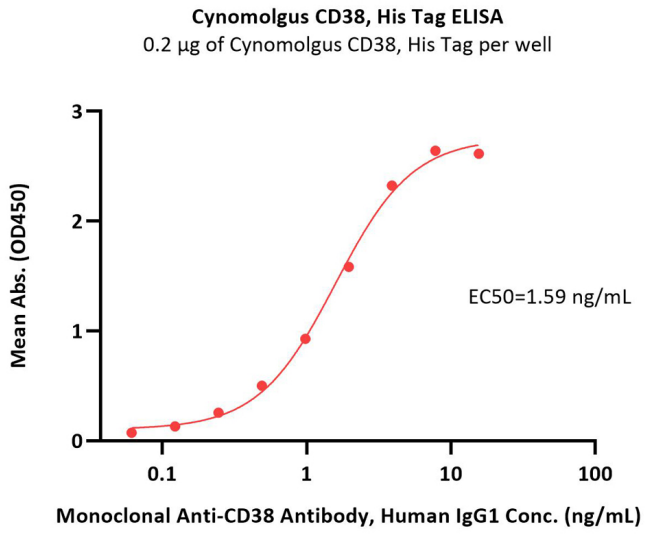
- -20°C to -70°C for 12 months in lyophilized state;
- -70°C for 3 months under sterile conditions after reconstitution.

SDS-PAGE



Cynomolgus CD38, 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%.

Bioactivity-ELISA



Immobilized Cynomolgus CD38, His Tag (Cat. No. CD8-C5223) at 2 μg/mL (100 μL/well) can bind Monoclonal Anti-CD38 Antibody, Human IgG1 with a linear range of 0.06-2 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.