Cynomolgus ADAM9 Protein, His Tag (active enzyme, MALS verified)

Catalog # AD9-C52H7

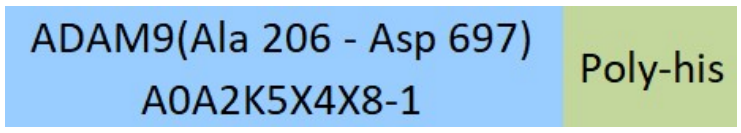
Synonym

Disintegrin and metalloproteinase domain-containing protein 9 (EC:3.4.24.-) Cellular disintegrin-related protein,Meltrin-gamma,Metalloprotease,disintegrin,cysteine-rich protein 9,Myeloma cell metalloproteinase,ADAM9,KIAA0021, MCMP, MDC9, MLTNG

Source

Cynomolgus ADAM9, His Tag(AD9-C52H7) is expressed from human 293 cells (HEK293). It contains AA Ala 206 - Asp 697 (Accession # A0A2K5X4X8-1). Predicted N-terminus: Ala 206

Molecular Characterization



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

The protein has a calculated MW of 55.3 kDa. The protein migrates as 65-70 kDa 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.

>90% as determined by SEC-MALS.

Formulation

Lyophilized from 0.22 μm filtered solution in 20 mM Tris, 500 mM NaCl, pH7.3 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

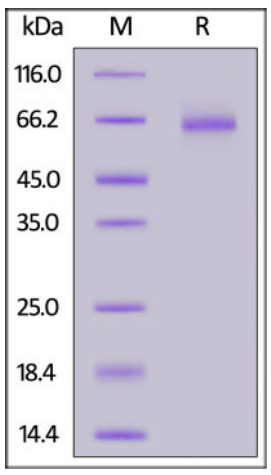
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

Please avoid repeated freeze-thaw cycles.

This product is stable after storage at:

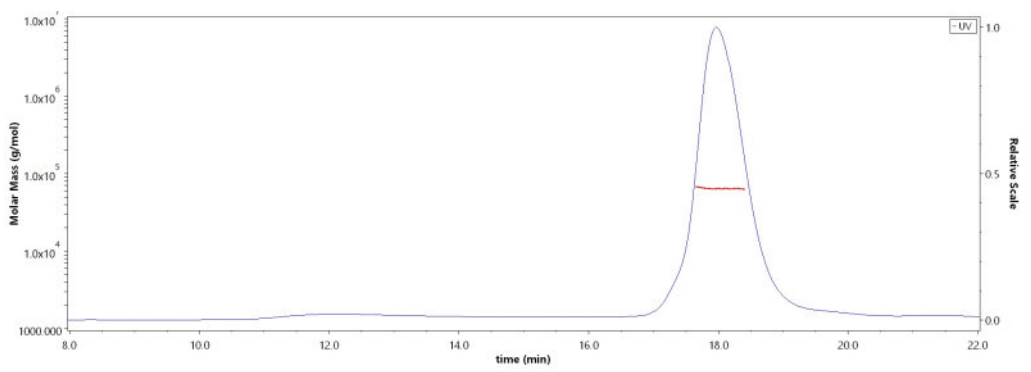
- -20°C to -70°C for 12 months in lyophilized state;
- -70°C for 3 months under sterile conditions after reconstitution.

SDS-PAGE



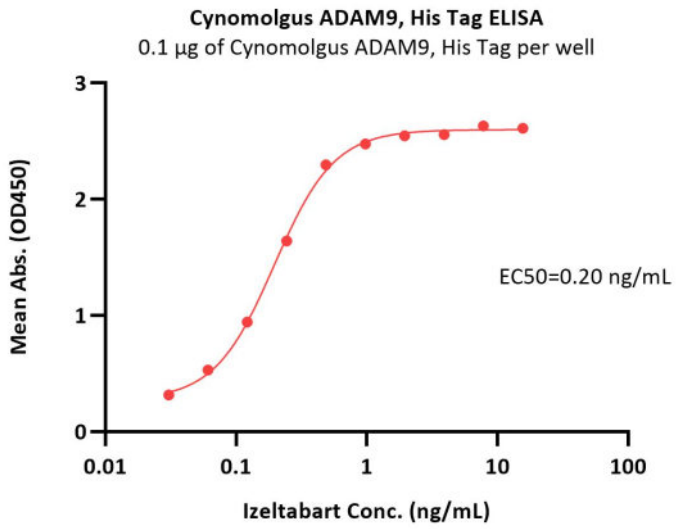
Cynomolgus ADAM9, His Tag on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 95%.

SEC-MALS



The purity of Cynomolgus ADAM9, His Tag (Cat. No. AD9-C52H7) is more than 90% and the molecular weight of this protein is around 50-80 kDa verified by SEC-MALS.
Report

Bioactivity-ELISA



Immobilized Cynomolgus ADAM9, His Tag (Cat. No. AD9-C52H7) at 1 μg/mL (100 μL/well) can bind Izeltabart with a linear range of 0.03-1 ng/mL (QC tested).

Bioactivity

Measured by its ability to cleave a fluorogenic peptide substrate Mca-PLAQAV-Dpa-RSSSR-NH2. The specific activity is >50 pmol/min/μg (QC tested).

Background

ADAM9 (A disintegrin and a metalloprotease 9) is a membrane-anchored protein that participates in a variety of physiological functions, primarily through the disintegrin domain for adhesion and the metalloprotease domain for ectodomain shedding of a wide variety of cell surface proteins. ADAM9 influences the developmental process, inflammation, and degenerative diseases.Recently, increasing evidence has shown that ADAM9 plays an important role in tumor biology. Overexpression of ADAM9 has been found in several cancer types and is correlated with tumoraggressiveness and poor prognosis. In addition, through either proteolytic or non-proteolytic pathways, ADAM9 promotes tumor progression, therapeutic resistance, and metastasis of cancers.Therefore, comprehensively understanding the mechanism of ADAM9 is crucial for the development of therapeutic anti-cancer strategies. In this review, we summarize the current understanding of ADAM9 in biological function, pathophysiological diseases, and various cancers. Recent advances in therapeutic strategies using ADAM9-related pathways are presented as well.

Clinical and Translational Updates