Biotinylated Human ADAM9 Protein, His,Avitag™ (active enzyme, MALS verified)

Catalog # AD9-H52E1

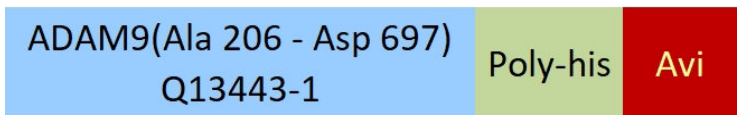
Synonym

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

Biotinylated Human ADAM9, His,Avitag(AD9-H52E1) is expressed from human 293 cells (HEK293). It contains AA Ala 206 - Asp 697 (Accession # Q13443-1).
Predicted N-terminus: Ala 206

Molecular Characterization



This protein carries a polyhistidine tag at the C-terminus, followed by an Avi tag (Avitag™).

The protein has a calculated MW of 55.2 kDa. The protein migrates as 63-80 kDa when calibrated against Star Ribbon Pre-stained Protein Marker under reducing (R) condition (SDS-PAGE) due to glycosylation.

Labeling

Biotinylation of this product is performed using Avitag™ technology. Briefly, the single lysine residue in the Avitag is enzymatically labeled with biotin.

Protein Ratio

Passed as determined by the HABA assay / binding ELISA.

Endotoxin

Less than 1.0 EU per μg by the LAL method.

Purity

>90% as determined by SDS-PAGE.

>90% as determined by SEC-MALS.

Formulation

Supplied as 0.2 μm filtered solution in 20 mM Tris, 500 mM NaCl, pH7.5 with glycerol 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.

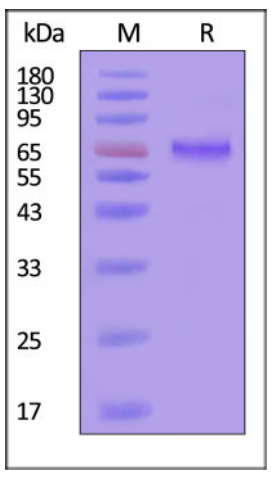
Storage

Please avoid repeated freeze-thaw cycles.

This product is stable after storage at:

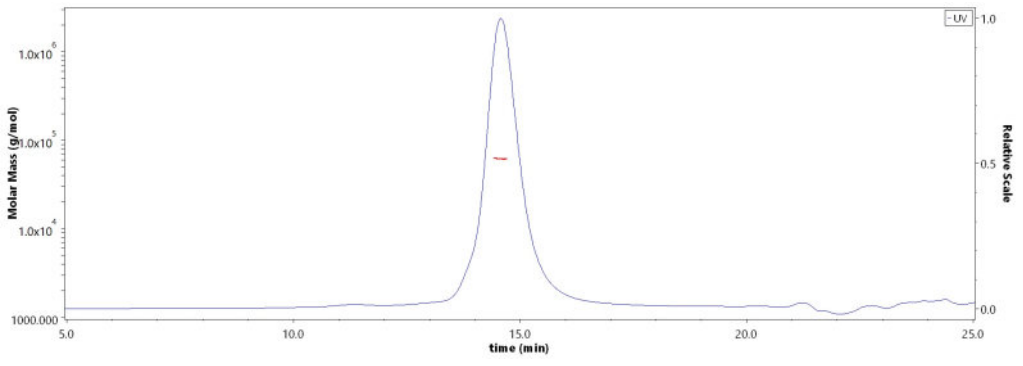
- The product MUST be stored at -70°C or lower upon receipt;
- -70°C for 3 months under sterile conditions.

SDS-PAGE



Biotinylated Human ADAM9, His,Avitag on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 90% (With Star Ribbon Pre-stained Protein Marker).

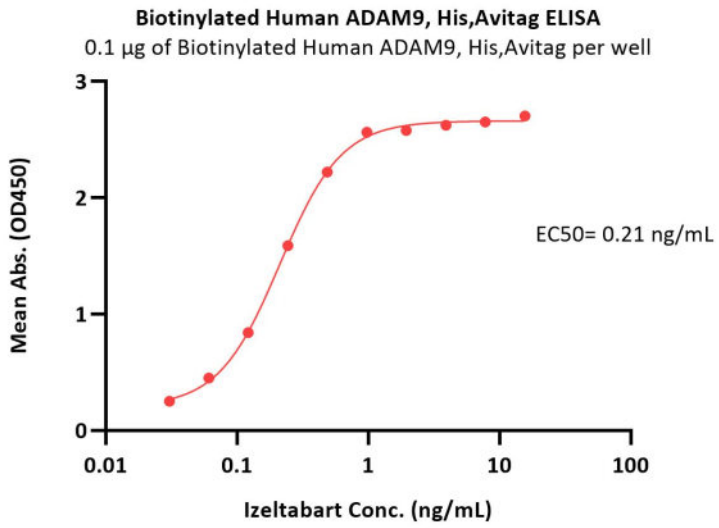
SEC-MALS

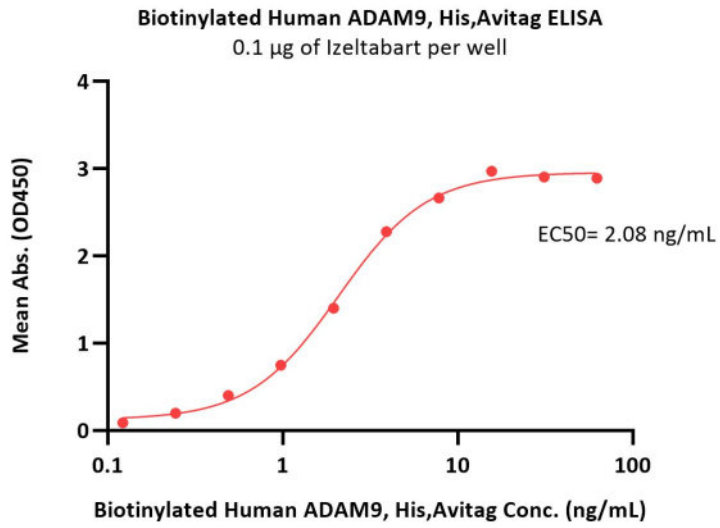


The purity of Biotinylated Human ADAM9, His,Avitag (Cat. No. AD9-H52E1) is more than 90% and the molecular weight of this protein is around 50-70 kDa verified by SEC-MALS.
Report

Discounts, Gifts, and more!

Bioactivity-ELISA





Immobilized Biotinylated Human ADAM9, His,Avitag (Cat. No. AD9-H52E1) at 1 μg/mL (100 μL/well) on streptavidin (Cat. No. STN-N5116) precoated (0.5 μg/well) plate can bind Izeltabart with a linear range of 0.03-1 ng/mL (QC tested).

Immobilized Izeltabart at 1 μg/mL (100 μL/well) can bind Biotinylated Human ADAM9, His,Avitag (Cat. No. AD9-H52E1) with a linear range of 0.1-4 ng/mL (Routinely tested).

Bioactivity

Measured by its ability to cleave a fluorogenic peptide substrate Mca-PLAQAV-Dpa-RSSSR-NH2. The specific activity is >30 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