

Human ADAM9 Protein, His Tag (206 - 413) (active enzyme)

Catalog # AD9-H52H4



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

Human ADAM9 Protein, His Tag (206 - 413)(AD9-H52H4) is expressed from
human 293 cells (HEK293). It contains AA Ala 206 - Ser 413 (Accession #
[Q13443-1](#)).
Predicted N-terminus: Ala 206

Molecular Characterization

ADAM9(Ala 206 - Ser 413)
Q13443-1

Poly-his

This protein carries a polyhistidine tag at the C-terminus.
The protein has a calculated MW of 24.6 kDa. The protein migrates as 25-30
kDa when calibrated against [Star Ribbon Pre-stained Protein Marker](#) under non-
reducing (NR) condition (SDS-PAGE) due to glycosylation.

Endotoxin

Less than 1.0 EU per µg by the LAL method.

Purity

>90% as determined by SDS-PAGE.

Formulation

Supplied as 0.2 µm filtered solution in 20 mM Tris, 800 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.*

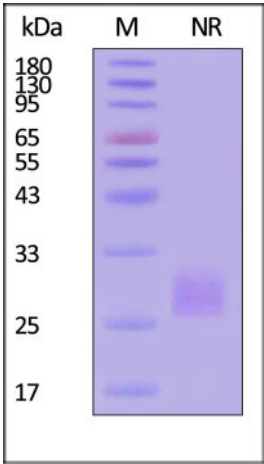
Storage

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



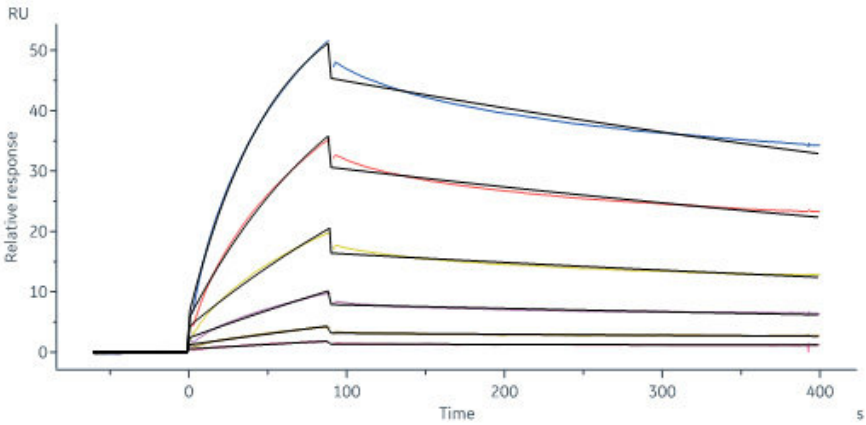
Human ADAM9 Protein, His Tag (206 - 413) on SDS-PAGE under non-
reducing (NR) condition. The gel was stained with Coomassie Blue. The purity
of the protein is greater than 90% (With [Star Ribbon Pre-stained Protein
Marker](#)).

Bioactivity-SPR



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Anti-ADAM9 Antibody captured on Protein A Chip can bind Human ADAM9 Protein, His Tag (206 - 413) (Cat. No. AD9-H52H4) with an affinity constant of 58.0 nM as determined in a SPR assay (Biacore 8K) (Routinely tested).

Bioactivity

Measured by its ability to cleave a fluorogenic peptide substrate Mca-PLAQAV-Dpa-RSSSR-NH2. The specific activity is >40 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 tumor aggressiveness 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

