

ADAM15 Protein, Mouse, Recombinant (His)

General Information

Synonyms:	metargidin;ADAM metallopeptidase domain 15;MDC15
Protein Construction:	A DNA sequence encoding the mouse ADAM15 (O88839-1) extracellular domain (Met 1-Thr 697) was expressed, with a C-terminal polyhistidine tag. Predicted N terminal: Arg 18 & Asp 208
Species:	Mouse
Expression Host:	HEK293 Cells
Accession:	O88839-1
Molecular Weight:	74.6 kDa (predicted); 80-90 kDa (reducing condition, due to glycosylation)

QC Testing

Biological Activity:	Activity testing is in progress. It is theoretically active, but we cannot guarantee it. If you require protein activity, we recommend choosing the eukaryotic expression version first.
Purity:	> 90 % as determined by SDS-PAGE
Endotoxin:	< 1.0 EU/µg of the protein as determined by the LAL method.
Formulation:	Lyophilized from a solution filtered through a 0.22 µm filter, containing PBS, pH 7.4. Typically, a mixture containing 5% to 8% trehalose, mannitol, and 0.01% Tween 80 is incorporated as a protective agent before lyophilization.

Preparation and Storage

Reconstitution:
A Certificate of Analysis (CoA) containing reconstitution instructions is included with the products. Please refer to the CoA for detailed information.

Stability & Storage:

It is recommended to store recombinant proteins at -20°C to -80°C for future use. Lyophilized powders can be stably stored for over 12 months, while liquid products can be stored for 6-12 months at -80°C. For reconstituted protein solutions, the solution can be stored at -20°C to -80°C for at least 3 months. Please avoid multiple freeze-thaw cycles and store products in aliquots.

Actual storage temperature shall be subject to the COA.

Shipping:

In general, lyophilized powders are shipped with blue ice, while solutions are shipped with dry ice.

Protein Background

ADAM15, also known as Metargidin, is a type I transmembrane glycoprotein belonging to the ADAM (A Disintegrin and Metalloprotease Domain) family of proteins and is widely expressed in different tissues and cell types. Members of this family contain an amino-terminal metalloprotease domain followed by a disintegrin domain, a cysteine-rich region and a membrane proximal EGF-like domain. The disintegrin domain of ADAM15/metargidin

contains an RGD tripeptide sequence, suggesting that it may potentially interact with the integrin family of proteins. ADAM15 is a transmembrane multi-domain proteins implicated in proteolysis, cell-cell and cell-matrix interactions in various disease conditions. There is also evidence supporting a role for ADAM15 in angiogenesis and angioinvasion of tumor cells, which are critical for unrestrained tumor growth and metastatic spread. Given its diverse functions, ADAM15 may represent a pivotal regulatory component of tumor progression, an important target for therapeutic intervention, or emerge as a biomarker of disease progression.

Reference

Poghosyan Z, et al. (2002) Phosphorylation-dependent interactions between ADAM15 cytoplasmic domain and Src family protein-tyrosine kinases. *J Biol Chem.* 277(7): 4999-5007.

Carl-McGrath S, et al. (2005) The disintegrin-metalloproteinases ADAM9, ADAM12, and ADAM15 are upregulated in gastric cancer. *Int J Oncol.* 26(1): 17-24.

Najy AJ, et al. (2008) ADAM15 supports prostate cancer metastasis by modulating tumor cell-endothelial cell interaction. *Cancer Res.* 68(4): 1092-9.

Maretzky T, et al. (2009) Characterization of the catalytic activity of the membrane-anchored metalloproteinase ADAM15 in cell-based assays. *Biochem J.* 420(1): 105-13.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

This product is for Research Use Only · Not for Human or Veterinary or Therapeutic Use

Tel: 781-999-4286 E_mail: info@targetmol.com Address: 34 Washington Street, Wellesley Hills, MA 02481