

### ADAM15 Antibody (Center) Blocking Peptide Synthetic peptide

Catalog # BP7425c

## Specification

# ADAM15 Antibody (Center) Blocking Peptide - Product Information

Primary Accession

## <u>Q13444</u>

# ADAM15 Antibody (Center) Blocking Peptide - Additional Information

Gene ID 8751

#### **Other Names**

Disintegrin and metalloproteinase domain-containing protein 15, ADAM 15, 3424-, Metalloprotease RGD disintegrin protein, Metalloproteinase-like, disintegrin-like, and cysteine-rich protein 15, MDC-15, Metargidin, ADAM15, MDC15

## Target/Specificity

The synthetic peptide sequence used to generate the antibody <a href=/products/AP7425c>AP7425c</a> was selected from the Center region of human ADAM15. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

Format

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

## Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

#### Precautions

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

# ADAM15 Antibody (Center) Blocking Peptide - Protein Information

#### Name ADAM15

## Synonyms MDC15

#### Function

Active metalloproteinase with gelatinolytic and collagenolytic activity. Plays a role in the wound healing process. Mediates both heterotypic intraepithelial cell/T-cell interactions and homotypic T-cell aggregation. Inhibits beta-1 integrin-mediated cell adhesion and migration of airway smooth muscle cells. Suppresses cell motility on or towards fibronectin possibly by driving alpha-v/beta-1 integrin (ITAGV-ITGB1) cell surface expression via ERK1/2 inactivation. Cleaves E-cadherin in response to growth factor deprivation. Plays a role in glomerular cell migration. Plays a role in pathological neovascularization. May play a role in cartilage remodeling. May be proteolytically processed, during sperm epididymal maturation and the acrosome reaction. May play a role in



sperm-egg binding through its disintegrin domain.

#### **Cellular Location**

Endomembrane system; Single-pass type I membrane protein. Cell junction, adherens junction. Cell projection, cilium, flagellum. Cytoplasmic vesicle, secretory vesicle, acrosome. Note=The majority of the protein is localized in a perinuclear compartment which may correspond to the trans-Golgi network or the late endosome. The pro-protein is the major detectable form on the cell surface, whereas the majority of the protein in the cell is processed (By similarity).

**Tissue Location** 

Expressed in colon and small intestine. Expressed in airway smooth muscle and glomerular mesangial cells (at protein level). Ubiquitously expressed. Overexpressed in atherosclerotic lesions. Constitutively expressed in cultured endothelium and smooth muscle. Expressed in chondrocytes. Expressed in airway smooth muscle and glomerular mesangial cells.

## ADAM15 Antibody (Center) Blocking Peptide - Protocols

Provided below are standard protocols that you may find useful for product applications.

<u>Blocking Peptides</u>

## ADAM15 Antibody (Center) Blocking Peptide - Images

## ADAM15 Antibody (Center) Blocking Peptide - Background

ADAM15 is a member of the ADAM (a disintegrin and metalloproteinase) protein family. ADAM family members are type I transmembrane glycoproteins known to be involved in cell adhesion and proteolytic ectodomain processing of cytokines and adhesion molecules. This protein contains multiple functional domains including a zinc-binding metalloprotease domain, a disintegrin-like domain, as well as a EGF-like domain. Through its disintegrin-like domain, the protein specifically interacts with the integrin beta chain, beta 3. It also interacts with Src family protein-tyrosine kinases in a phosphorylation-dependent manner, suggesting that this protein may function in cell-cell adhesion as well as in cellular signaling.

## ADAM15 Antibody (Center) Blocking Peptide - References

McKie N., Edwards T.Biochem. Biophys. Res. Commun. 230:335-339(1997) Zhang X.P., Kamata T.J. Biol. Chem. 273:7345-7350(1998)Poghosyan Z., Robbins S.M.J. Biol. Chem. 277:4999-5007(2002)