

ADAM15 Blocking Peptide (N-Term)

Synthetic peptide Catalog # BP21324a

Specification

ADAM15 Blocking Peptide (N-Term) - Product Information

Primary Accession <u>Q13444</u>

ADAM15 Blocking Peptide (N-Term) - 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 is selected from aa 37-52 of HUMAN ADAM15

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 Blocking Peptide (N-Term) - Protein Information

Name ADAM15

Synonyms MDC15

Function

ADAM15 Blocking Peptide (N-Term) - Background

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.

ADAM15 Blocking Peptide (N-Term) - References

Kraetzschmar J., et al.J. Biol. Chem. 271:4593-4596(1996).
Herren B., et al.FASEB J. 11:173-180(1997).
Charrier L., et al.Am. J. Physiol. 288:G346-G353(2005).
Kleino I., et al.BMC Mol. Biol. 8:90-90(2007).
Zhong J.L., et al.Mol. Cancer Res. 6:383-394(2008).



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 Blocking Peptide (N-Term) - Protocols

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

• Blocking Peptides