

### ADAMTS5 Antibody (Center) Blocking Peptide Synthetic peptide

Catalog # BP7447c

## Specification

# ADAMTS5 Antibody (Center) Blocking Peptide - Product Information

Primary Accession

<u>Q9UNA0</u>

# ADAMTS5 Antibody (Center) Blocking Peptide - Additional Information

Gene ID 11096

#### **Other Names**

A disintegrin and metalloproteinase with thrombospondin motifs 5, ADAM-TS 5, ADAM-TS5, ADAMTS-5, 3424-, A disintegrin and metalloproteinase with thrombospondin motifs 11, ADAM-TS 11, ADAMTS-11, ADMP-2, Aggrecanase-2, ADAMTS5, ADAMTS11, ADMP2

### Target/Specificity

The synthetic peptide sequence used to generate the antibody <a href=/products/AP7447c>AP7447c</a> was selected from the Center region of human ADAMTS5. 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.

# ADAMTS5 Antibody (Center) Blocking Peptide - Protein Information

#### Name ADAMTS5

Synonyms ADAMTS11, ADMP2

#### Function

Metalloproteinase that plays an important role in connective tissue organization, development, inflammation and cell migration. Extracellular matrix (ECM) degrading enzyme that show proteolytic activity toward the hyalectan group of chondroitin sulfate proteoglycans (CSPGs) including ACAN, VCAN, BCAN and NCAN (PubMed:<a

href="http://www.uniprot.org/citations/16133547" target="\_blank">16133547</a>, PubMed:<a href="http://www.uniprot.org/citations/18992360" target="\_blank">18992360</a>). Cleavage within the hyalectans occurs at Glu-Xaa recognition motifs. Plays a role in embryonic development, including limb and cardiac morphogenesis, and skeletal muscle development through its VCAN



remodeling properties. Cleaves VCAN in the pericellular matrix surrounding myoblasts, facilitating myoblast contact and fusion which is required for skeletal muscle development and regeneration (By similarity). Participates in development of brown adipose tissue and browning of white adipose tissue (By similarity). Plays an important role for T-lymphocyte migration from draining lymph nodes following viral infection.

**Cellular Location** Secreted, extracellular space, extracellular matrix

**Tissue Location** Expressed at low level in placenta primarily but also detected in heart and brain, cervix, uterus, bladder, esophagus, rib cartilage, chondroblastoma, fibrous tissue and a joint capsule from an arthritic patient

## ADAMTS5 Antibody (Center) Blocking Peptide - Protocols

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

#### <u>Blocking Peptides</u>

### ADAMTS5 Antibody (Center) Blocking Peptide - Images

### ADAMTS5 Antibody (Center) Blocking Peptide - Background

ADAMTS5 is a member of the ADAMTS (a disintegrin and metalloproteinase with thrombospondin motifs) protein family. Members of the family share several distinct protein modules, including a propeptide region, a metalloproteinase domain, a disintegrin-like domain, and a thrombospondin type 1 (TS) motif. Individual members of this family differ in the number of C-terminal TS motifs, and some have unique C-terminal domains.

## ADAMTS5 Antibody (Center) Blocking Peptide - References

Abbaszade I., Liu R.-Q.J. Biol. Chem. 274:23443-23450(1999) Hurskainen T.L., Hirohata S.J. Biol. Chem. 274:25555-25563(1999)