

### ADAMTS4 Antibody (C-term) Blocking Peptide Synthetic peptide

Catalog # BP7439b

## Specification

# ADAMTS4 Antibody (C-term) Blocking Peptide - Product Information

Primary Accession

### <u>075173</u>

## ADAMTS4 Antibody (C-term) Blocking Peptide - Additional Information

Gene ID 9507

**Other Names** 

A disintegrin and metalloproteinase with thrombospondin motifs 4, ADAM-TS 4, ADAM-TS4, ADAMTS-4, ADMP-1, Aggrecanase-1, ADAMTS4, KIAA0688

#### Target/Specificity

The synthetic peptide sequence used to generate the antibody <a href=/products/AP7439b>AP7439b</a> was selected from the C-term region of human ADAMTS4. 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.

## ADAMTS4 Antibody (C-term) Blocking Peptide - Protein Information

Name ADAMTS4

### Synonyms KIAA0688

Function

Cleaves aggrecan, a cartilage proteoglycan, at the '392- Glu-|-Ala-393' site and may be involved in its turnover (PubMed:<a href="http://www.uniprot.org/citations/10356395"

target="\_blank">10356395</a>, PubMed:<a href="http://www.uniprot.org/citations/10827174" target="\_blank">10827174</a>). Also cleaves COMP (PubMed:<a

href="http://www.uniprot.org/citations/39672391" target="\_blank">39672391</a>). May play an important role in the destruction of aggrecan in arthritic diseases. Could be a critical factor in the exacerbation of neurodegeneration in Alzheimer disease.

**Cellular Location** 



Secreted, extracellular space, extracellular matrix

**Tissue Location** Expressed in brain, lung and heart (PubMed:23897278). Expressed at very low level in placenta and skeletal muscles (PubMed:23897278). Isoform 2: Detected in osteoarthritic synovium (PubMed:16723216, PubMed:23897278)

### ADAMTS4 Antibody (C-term) Blocking Peptide - Protocols

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

<u>Blocking Peptides</u>

### ADAMTS4 Antibody (C-term) Blocking Peptide - Images

### ADAMTS4 Antibody (C-term) Blocking Peptide - Background

ADAMTS4 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. The enzyme lacks a C-terminal TS motif. It is responsible for the degradation of aggrecan, a major proteoglycan of cartilage, and brevican, a brain-specific extracellular matrix protein. The cleavage of aggrecan and brevican suggests key roles of this enzyme in arthritic disease and in the central nervous system, potentially, in the progression of glioma.

#### ADAMTS4 Antibody (C-term) Blocking Peptide - References

Tortorella M.D., Burn T.C.Science 284:1664-1666(1999) Tortorella M.D., Pratta M.A., Liu R.-Q.J. Biol. Chem. 275:25791-25797(2000)