10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

ADAMTS4 Antibody (C-term) Blocking Peptide

Synthetic peptide
Catalog # BP7439b

Specification

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

Primary Accession O75173

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 AP7439b 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, and may be involved in its turnover. May play an important role in the destruction of aggrecan in arthritic diseases. Could also be a critical factor in the exacerbation of neurodegeneration in Alzheimer disease. Cleaves aggrecan at the '392-Glu-|-Ala-393' site.

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.

- Blocking Peptides

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)