

Anti-ADAMTS4 Antibody
Catalog # ABO10798**Specification**

Anti-ADAMTS4 Antibody - Product Information

Application	WB
Primary Accession	O75173
Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Format	Lyophilized

Description

Rabbit IgG polyclonal antibody for A disintegrin and metalloproteinase with thrombospondin motifs 4(ADAMTS4) detection. Tested with WB in Human;Mouse;Rat.

Reconstitution

Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Anti-ADAMTS4 Antibody - Additional Information

Gene ID 9507

Other Names

A disintegrin and metalloproteinase with thrombospondin motifs 4, ADAM-TS 4, ADAM-TS4, ADAMTS-4, 3.4.24.82, ADMP-1, Aggrecanase-1, ADAMTS4, KIAA0688

Calculated MW

90197 MW KDa

Application Details

Western blot, 0.1-0.5 µg/ml, Human, Mouse, Rat

Subcellular Localization

Secreted, extracellular space, extracellular matrix .

Tissue Specificity

Expressed in brain, lung and heart. Expressed at very low level in placenta and skeletal muscles. Isoform 2 is detected in osteoarthritic synovium. .

Protein Name

A disintegrin and metalloproteinase with thrombospondin motifs 4(ADAM-TS 4/ADAM-TS4/ADAMTS-4)

Contents

Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg Thimerosal, 0.05mg NaN3.

Immunogen

A synthetic peptide corresponding to a sequence at the C-terminus of human ADAMTS4(820-837aa RRAQILEILRRRPWAGRK), different from the related rat and mouse sequences by three amino

acids.

Purification

Immunogen affinity purified.

Cross Reactivity

No cross reactivity with other proteins

Storage

At -20°C for one year. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for a longer time. Avoid repeated freezing and thawing.

Sequence Similarities

Contains 1 disintegrin domain.

Anti-ADAMTS4 Antibody - 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:10356395, PubMed:10827174). Also cleaves COMP (PubMed:39672391). 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)

Anti-ADAMTS4 Antibody - Protocols

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

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

Anti-ADAMTS4 Antibody - Images



Anti-ADAMTS4 antibody, ABO10798, Western blotting Lane 1: Rat Brain Tissue Lysate Lane 2: Mouse Brain Tissue Lysate

Anti-ADAMTS4 Antibody - Background

ADAMTS4, A disintegrin and metalloproteinase with thrombospondin motifs 4 is an enzyme that in humans is encoded by the ADAMTS4 gene. ADAMTS4 is a member of the large ADAMTS family of zinc-dependent proteases. The human ADAMTS4 gene is mapped to chromosome 1 by somatic cell hybrid analysis. The enzyme encoded by this gene 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.