

Anti-ADAMTS4 Picoband Antibody
Catalog # ABO10265

Specification

Anti-ADAMTS4 Picoband Antibody - Product Information

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

Description

Rabbit IgG polyclonal antibody for A disintegrin and metalloproteinase with thrombospondin motifs 4(ADAMTS4) detection. Tested with WB, IHC-P, ELISA in Human.

Reconstitution

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

Anti-ADAMTS4 Picoband 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

Immunohistochemistry(Paraffin-embedded Section), 0.5-1 µg/ml, Human, By Heat

ELISA , 0.1-0.5 µg/ml, Human,
Western blot, 0.1-0.5 µg/ml, Human

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

Contents

Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na₂HPO₄, 0.05mg Na₃.

Immunogen

A synthetic peptide corresponding to a sequence at the C-terminus of human ADAMTS4 (813-837aa TPQDWLHRRRAQILEILRRRPWAGRK), different from the related mouse sequence by five

amino acids, and from the related rat sequence by six 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.

Anti-ADAMTS4 Picoband Antibody - 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-I-Ala-393' site.

Cellular Location

Secreted, extracellular space, extracellular matrix

Tissue Location

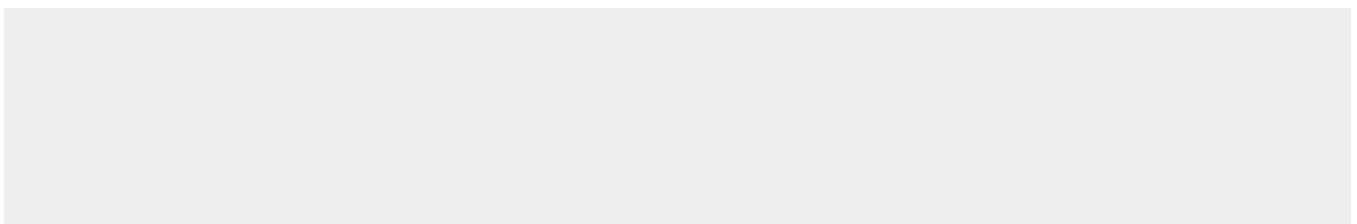
Expressed in brain, lung and heart (PubMed:23897278). Expressed at very low level in placenta and skeletal muscles (PubMed:23897278). Isoform 2: Detected in osteoarthritic synovium (PubMed:16723216, PubMed:23897278)

Anti-ADAMTS4 Picoband 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 Picoband Antibody - Images



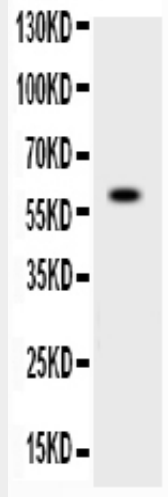


Figure 1. Western blot analysis of ADAMTS4 using anti-ADAMTS4 antibody (ABO10265). Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. Lane 1: Recombinant Human ADAMTS4 Protein 0.5ng After Electrophoresis, proteins were transferred to a Nitrocellulose membrane at 150mA for 50-90 minutes. Blocked the membrane with 5% Non-fat Milk/ TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-ADAMTS4 antigen affinity purified polyclonal antibody (Catalog # ABO10265) at 0.5 μ g/mL overnight at 4 $^{\circ}$ C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:10000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit with Tanon 5200 system. A specific band was detected for ADAMTS4 at approximately 58KD. The expected band size for ADAMTS4 is at 53KD.

Anti-ADAMTS4 Picoband 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.