

Anti-ADAMTS4 Antibody

Catalog # ABO10798

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.

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
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. .
Source	Eukaryota
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 Na ₂ HPO ₄ , 0.05mg Thimerosal, 0.05mg Na ₃ .
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.

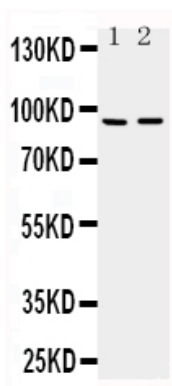
Protein Information

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)

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.

Images



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

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.