

Rabbit ADAMTS4 Polyclonal Antibody | anti-ADAMTS4 antibody

ADAMTS4 Antibody

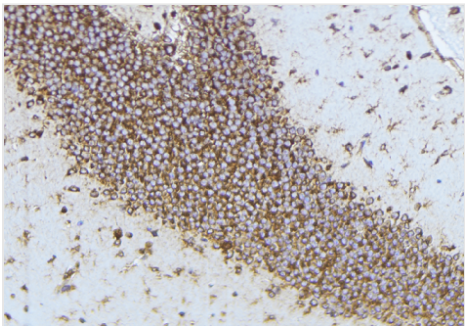
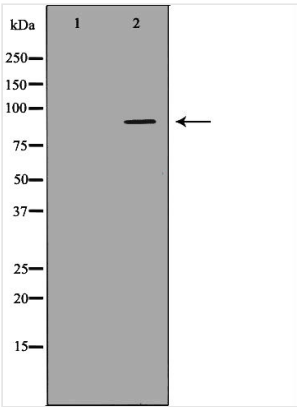
CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA326735	Rabbit	Human, Mouse, Rat	ELISA, Immunohistochemistry, Western Blot

PRODUCT SYNONYMS

ADAMTS4; Polyclonal Antibody; ADAMTS4 Antibody; A disintegrin and metalloproteinase with thrombospondin motifs 4; A disintegrin like and metalloprotease (repolyisin type) with thrombospondin type 1 motif 4; A disintegrin like and metalloprotease with thrombospondin type 1 motif 4; ADAM metalloproteinase with thrombospondin type 1 motif 4; ADAM TS 4; ADAM TS4; ADAM-TS 4; ADAM-TS4; ADAMTS 2; ADAMTS 4; ADAMTS-4; ADAMTS2; ADAMTS4 protein; ADMP 1; ADMP-1; ADMP1; Aggrecanase 1; Aggrecanase-1; Aggrecanase1; ATS4_HUMAN; KIAA0688; anti-ADAMTS4 antibody

PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Isotype	IgG
Specificity	ADAMTS4 antibody detects endogenous levels of total ADAMTS4
Purity/Purification	The antiserum was purified by peptide affinity chromatography using SulfoLink Coupling Resin.
Form/Format	Liquid Phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Concentration	1mg/ml (varies by lot)
Sequence Length	846
Applicable Applications for anti-ADAMTS4 antibody	ELISA, IHC (Immunohistochemistry), WB (Western Blot)
Immunogen	A synthesized peptide derived from human ADAMTS4
Subcellular Location	Secreted > Extracellular Space > Extracellular Matrix.
Tissue Specificity	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).
Predicted Cross Reactivity	Pig, Bovine, Horse, Sheep, Rabbit, Dog
Similarity	Pig (91%), Bovine (100%), Horse (91%), Sheep (91%), Rabbit (91%), Dog (100%)
Conjugation	Unconjugated
Preparation and Storage	Store at -20 degree C. Stable for 12 months from date of receipt.



IHC (Immunohistochemistry)
AAA326735 at 1/100 staining Mouse brain tissue by IHC-P. The sample was formaldehyde fixed and a heat mediated antigen retrieval step in citrate buffer was performed. The sample was then blocked and incubated with the antibody for 1.5 hours at 22 degree C. An HRP conjugated goat anti-rabbit antibody was used as the secondary.

WB (Western Blot)
Western blot analysis of extracts of hela cell line, using ADAMTS4 antibody, the lane on the left is blocked by antigen peptide.

ADDITIONAL INFORMATION

Related Product Information for anti-ADAMTS4 antibody	Description: This gene encodes 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 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. 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. Subunit Structure: Interacts with SRPX2. Post-translational Modifications: The precursor is cleaved by a furin endopeptidase. Glycosylated. Can be O-fucosylated by POFUT2 on a serine or a threonine residue found within the consensus sequence C1-X2-(S/T)-C2-G of the TSP type-1 repeat domains where C1 and C2 are the first and second cysteine residue of the repeat, respectively. Fucosylated repeats can then be further glycosylated by the addition of a beta-1, 3-glucose residue by the glucosyltransferase, B3GALT1. Fucosylation mediates the efficient secretion of ADAMTS family members. Also can be C-glycosylated with one or two mannose molecules on tryptophan residues within the consensus sequence W-X-X-W of the TPRs, and N-glycosylated. These other glycosylations can also facilitate secretion (By similarity). Similarity: The spacer domain and the TSP type-1 domains are important for a tight interaction with the extracellular matrix. The conserved cysteine present in the cysteine-switch motif binds the catalytic zinc ion, thus inhibiting the enzyme. The dissociation of the cysteine from the zinc ion upon the activation-peptide release activates the enzyme.
References	Zhou S, Lu W, Chen L, Ge Q, Chen D, Xu Z, Shi D, Dai J, Li J, Ju H, Cao Y, Qin J, Chen S, Teng H, Jiang Q; Journal: Sci Rep. AMPK deficiency in chondrocytes accelerated the progression of instability-induced and ageing-associated osteoarthritis in adult mice.

NCBI AND UNIPROT INFORMATION

NCBI GI #	998614223
NCBI GeneID	9507
NCBI Accession #	NP_001307265.1
NCBI GenBank Nucleotide #	NM_001320336.1
UniProt Accession #	O75173; Q2HYD0; Q5VTW2; Q6P4Q8; Q6UWA8; Q9UN83
Molecular Weight	Observed: 90 kDa Predicted: 91 kDa

NCBI Official Full Name	A disintegrin and metalloproteinase with thrombospondin motifs 4 isoform 2
NCBI Official Synonym Full Names	ADAM metalloproteinase with thrombospondin type 1 motif 4
NCBI Official Symbol	ADAMTS4
NCBI Official Synonym Symbols	ADMP-1; ADAMTS-2; ADAMTS-4
NCBI Protein Information	A disintegrin and metalloproteinase with thrombospondin motifs 4
UniProt Protein Name	A disintegrin and metalloproteinase with thrombospondin motifs 4
UniProt Gene Name	ADAMTS4
UniProt Synonym Gene Names	KIAA0688; ADAM-TS 4; ADAM-TS4; ADAMTS-4

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

AAA Biotech | Tel: +1 (619) 604-9440 | Fax: +1 (619) 604-9441 | contact@aaabiotech.com

Online datasheet: <https://www.aaabiotech.com/polyclonal/adamts4-antibody-immunohistochemistry-western-blot-elisa/326735>