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ADAMTS4 Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP7439b

Specification

ADAMTS4 Antibody (C-term) - Product Information

Application	**WB,E**
Primary Accession	O75173
Reactivity	**Human, Mouse**
Predicted	**Human**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**Rabbit IgG**
Antigen Region	**705-736**

ADAMTS4 Antibody (C-term) - 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
This ADAMTS4 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 705-736 amino acids from the C-terminal region of human ADAMTS4.

Dilution
WB~~1:2000
E~~Use at an assay dependent concentration.

Format
Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage
Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions
ADAMTS4 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

ADAMTS4 Antibody (C-term) - 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

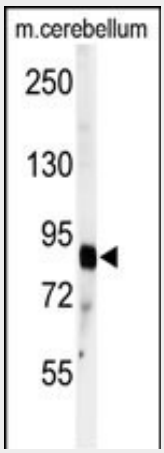
Tissue Location
Expressed in brain, lung and heart (PubMed:23897278). Expressed at very low level in placenta and skeletal muscles (PubMed:23897278). Isoform 2: Detected in osteoarthritic synovium (PubMed:16723216, PubMed:23897278)

ADAMTS4 Antibody (C-term) - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

ADAMTS4 Antibody (C-term) - Images



Western blot analysis of anti-ADAMTS4 Antibody (C-term)(Cat.#AP7439b) in mouse cerebellum tissue lysates (35ug/lane). ADAMTS4 (arrow) was detected using the purified Pab.

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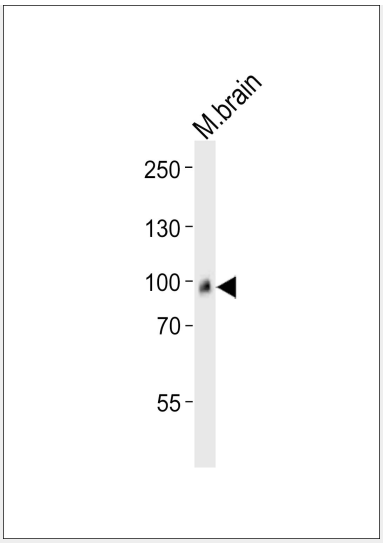
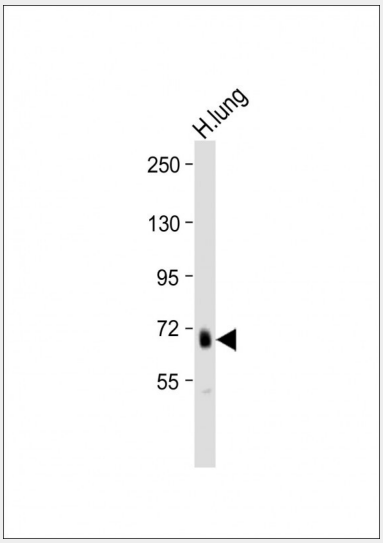


Western blot analysis of lysate from mouse brain tissue lysate, using ADAMTS4 Antibody (C-term)(Cat. #AP7439b). AP7439b was diluted at 1:1000. A goat anti-rabbit IgG H&L(HRP) at 1:10000 dilution was used as the secondary antibody. Lysate at 20ug.



Anti-ADAMTS4 Antibody (C-term) at 1:2000 dilution + Human lung lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 90 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

ADAMTS4 Antibody (C-term) - 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) - 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)