

Product datasheet

Anti-ADAMTS7 antibody ab45044

[3 References](#) [1 Image](#)

Overview

Product name	Anti-ADAMTS7 antibody
Description	Rabbit polyclonal to ADAMTS7
Host species	Rabbit
Specificity	This antibody is specific for the prpeptide domain after the second furin cleavage site of the full lenght ADAMTS7 and of the short form ADAMTS7A.
Tested applications	Suitable for: WB
Species reactivity	Reacts with: Human
Immunogen	Synthetic peptide based on the propeptide domain of human ADAMTS7, after the second furin cleavage site between amino acids 80-140. Read Abcam's proprietary immunogen policy (Peptide available as ab45240 .)
General notes	<p>The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets your needs before purchasing.</p> <p>If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, along with publications, customer reviews and Q&As</p>

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid freeze / thaw cycles.
Storage buffer	pH: 7.40 Preservative: 0.05% Sodium azide Constituents: PBS, 50% Glycerol, 2.9% Sodium chloride
Purity	Immunogen affinity purified
Clonality	Polyclonal
Isotype	IgG

Applications

The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab45044 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
WB		

Application notes

WB: 1/1000 when using colorimetric substrates such as BCIP/NBT, and 1/5000 for chemiluminescent substrates. Detects a band of approximately 300kDa (predicted molecular weight: 181 kDa). Glycosylation and the abundance of cysteine residues gives ADAMTS7 a greater apparent molecular weight of around 300kDa on reduced SDS-PAGE gels. Dilution optimised using Chromogenic detection. Not yet tested in other applications. Optimal dilutions/concentrations should be determined by the end user.

Target

Function

Metalloprotease that may play a role in the degradation of COMP.

Tissue specificity

Expressed in heart, brain, placenta, lung, liver, skeletal muscle, kidney and pancreas. Detected in meniscus, bone, tendon, cartilage, synovium, fat and ligaments.

Sequence similarities

Contains 1 disintegrin domain.
Contains 1 peptidase M12B domain.
Contains 1 PLAC domain.
Contains 8 TSP type-1 domains.

Domain

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.

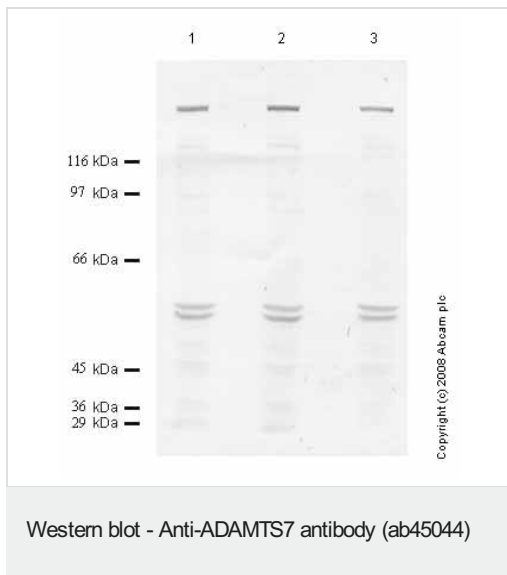
Post-translational modifications

N-glycosylated. Can be O-fucosylated by POFUT2 on a serine or a threonine residue found within the consensus sequence C1-X(2)-(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, B3GALTL. 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. N- and C-glycosylations can also facilitate secretion. O-glycosylated proteoglycan. Contains chondroitin sulfate. May be cleaved by a furin endopeptidase (By similarity). The precursor is sequentially processed.

Cellular localization

Secreted, extracellular space, extracellular matrix. Also found associated with the external cell surface.

Images



All lanes : Anti-ADAMTS7 antibody (ab45044) at 1/1000 dilution

Lane 1 : Whole cell lysate prepared from human rhabdomyosarcoma RD cells (treated with TPA) at 35 μ l

Lane 2 : Whole cell lysate prepared from human rhabdomyosarcoma RD cells (treated with TPA) at 30 μ l

Lane 3 : Whole cell lysate prepared from human rhabdomyosarcoma RD cells (treated with TPA) at 25 μ l

Predicted band size: 181 kDa

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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