

## Product datasheet

# Anti-ADAMTS7 antibody ab45044

3 References 1 Image

### Overview

---

<b>Product name</b>	Anti-ADAMTS7 antibody
<b>Description</b>	Rabbit polyclonal to ADAMTS7
<b>Host species</b>	Rabbit
<b>Specificity</b>	This antibody is specific for the propeptide domain after the second furin cleavage site of the full length ADAMTS7 and of the short form ADAMTS7A.
<b>Tested applications</b>	<b>Suitable for:</b> WB
<b>Species reactivity</b>	<b>Reacts with:</b> Human
<b>Immunogen</b>	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 <a href="#">ab45240</a> .)
<b>General notes</b>	<p>Reproducibility is key to advancing scientific discovery and accelerating scientists' next breakthrough.</p> <p>Abcam is leading the way with our range of recombinant antibodies, knockout-validated antibodies and knockout cell lines, all of which support improved reproducibility.</p> <p>We are also planning to innovate the way in which we present recommended applications and species on our product datasheets, so that only applications &amp; species that have been tested in our own labs, our suppliers or by selected trusted collaborators are covered by our Abpromise™ guarantee.</p> <p>In preparation for this, we have started to update the applications &amp; species that this product is Abpromise guaranteed for.</p> <p>We are also updating the applications &amp; species that this product has been “predicted to work with,” however this information is not covered by our Abpromise guarantee.</p> <p>Applications &amp; species from publications and Abreviews that have not been tested in our own labs or in those of our suppliers are not covered by the Abpromise guarantee.</p> <p>Please check that this product meets your needs before purchasing. 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, as well as customer reviews and Q&amp;As.</p>

### Properties

---

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

## Applications

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

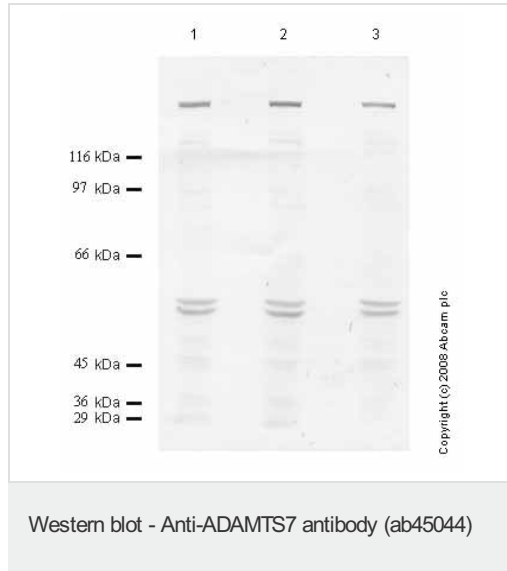
<b>Function</b>	Metalloprotease that may play a role in the degradation of COMP.
<b>Tissue specificity</b>	Expressed in heart, brain, placenta, lung, liver, skeletal muscle, kidney and pancreas. Detected in meniscus, bone, tendon, cartilage, synovium, fat and ligaments.
<b>Sequence similarities</b>	Contains 1 disintegrin domain. Contains 1 peptidase M12B domain. Contains 1 PLAC domain. Contains 8 TSP type-1 domains.
<b>Domain</b>	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.
<b>Post-translational modifications</b>	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 glycosyltransferase, 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  $\mu$ l

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

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

**Predicted band size:** 181 kDa

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

## Our Abpromise to you: Quality guaranteed and expert technical support

- Replacement or refund for products not performing as stated on the datasheet
- Valid for 12 months from date of delivery
- Response to your inquiry within 24 hours
- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit <https://www.abcam.com/abpromise> or contact our technical team.

## Terms and conditions

- Guarantee only valid for products bought direct from Abcam or one of our authorized distributors