


Product datasheet

Anti-ADAM10 antibody ab1997

★★★★☆ [24 Abreviews](#) [110 References](#) [6 Images](#)

Overview

Product name	Anti-ADAM10 antibody
Description	Rabbit polyclonal to ADAM10
Host species	Rabbit
Tested applications	Suitable for: WB, ICC
Species reactivity	Reacts with: Human Predicted to work with: Rat, Cow, Pig 
Immunogen	Synthetic peptide corresponding to Human ADAM10 aa 732-748. Sequence: PQRQRPRESYQMGHMRR (Peptide available as ab7868)

 [Run BLAST with](#)

 [Run BLAST with](#)

General notes

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.

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

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Upon delivery aliquot and store at -20°C or -80°C. Avoid repeated freeze / thaw cycles.
Storage buffer	pH: 7.2 Preservative: 0.02% Sodium azide Constituent: PBS
Purity	Protein A purified
Clonality	Polyclonal
Isotype	IgG

Applications

The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab1997 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	★★★★★ (10)	1/500 - 1/2000. Predicted molecular weight: 84 kDa. Can be blocked with ADAM10 peptide (ab7868) .
ICC	★★★★★ (1)	Use a concentration of 2 µg/ml.

Target

Function

Cleaves the membrane-bound precursor of TNF-alpha at '76-Ala-Val-77' to its mature soluble form. Responsible for the proteolytical release of soluble JAM3 from endothelial cells surface. Responsible for the proteolytic release of several other cell-surface proteins, including heparin-binding epidermal growth-like factor, ephrin-A2 and for constitutive and regulated alpha-secretase cleavage of amyloid precursor protein (APP). Contributes to the normal cleavage of the cellular prion protein. Involved in the cleavage of the adhesion molecule L1 at the cell surface and in released membrane vesicles, suggesting a vesicle-based protease activity. Controls also the proteolytic processing of Notch and mediates lateral inhibition during neurogenesis.

Tissue specificity

Expressed in spleen, lymph node, thymus, peripheral blood leukocyte, bone marrow, cartilage, chondrocytes and fetal liver.

Sequence similarities

Contains 1 disintegrin domain.
Contains 1 peptidase M12B domain.

Domain

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.

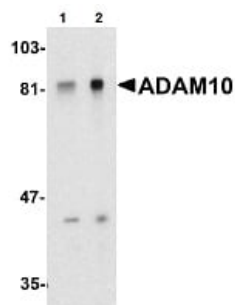
Post-translational modifications

The precursor is cleaved by a furin endopeptidase.

Cellular localization

Cell membrane. Endomembrane system. Is localized in the plasma membrane but is predominantly expressed in the Golgi apparatus and in released membrane vesicles derived likely from the Golgi.

Images



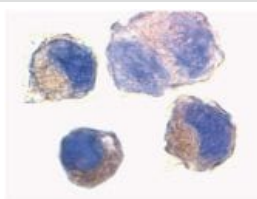
Western blot - Anti-ADAM10 antibody (ab1997)

Lane 1 : Anti-ADAM10 antibody (ab1997) at 1 µg/ml

Lane 2 : Anti-ADAM10 antibody (ab1997) at 2 µg/ml

All lanes : Jurkat whole cell lysate

Predicted band size: 84 kDa

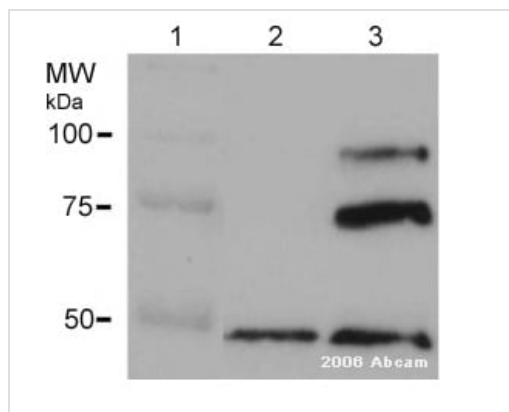


Immunocytochemistry - Anti-ADAM10 antibody (ab1997)

ab1997 at 2µg/ml staining K562 cells by ICC/IF.

Immunocytochemistry - Anti-ADAM10 antibody (ab1997)

ICC/IF image of ab1997 stained HeLa cells. The cells were 4% PFA fixed (10 min) and then incubated in 1%BSA / 10% normal goat serum / 0.3M glycine in 0.1% PBS-Tween for 1h to permeabilise the cells and block non-specific protein-protein interactions. The cells were then incubated with the antibody (ab1997, 1µg/ml) overnight at +4°C. The secondary antibody (green) was Alexa Fluor® 488 goat anti-rabbit IgG (H+L) used at a 1/1000 dilution for 1h. Alexa Fluor® 594 WGA was used to label plasma membranes (red) at a 1/200 dilution for 1h. DAPI was used to stain the cell nuclei (blue) at a concentration of 1.43µM.



Western blot - Anti-ADAM10 antibody (ab1997)
This image is courtesy of an anonymous Abreview

All lanes : Anti-ADAM10 antibody (ab1997) at 1/1666 dilution

Lane 2 : ADAM10 siRNA treated human keratinocyte cells

Lane 3 : Non-treated human keratinocyte cells.

Secondary

All lanes : HRP conjugated Goat anti-rabbit antibody

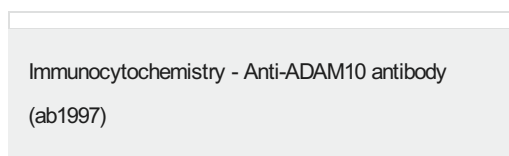
Developed using the ECL technique.

Performed under reducing conditions.

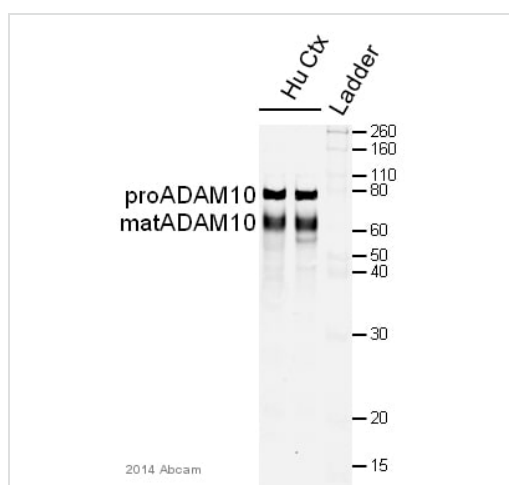
Predicted band size: 84 kDa

Observed band size: 100,75 kDa

Exposure time: 1 minute



Immunofluorescence of ADAM10 in K562 cells using ab1997 at 10 ug/ml.



Western blot - Anti-ADAM10 antibody (ab1997)
This image is courtesy of an Abreview submitted by Grant Corbett

All lanes : Anti-ADAM10 antibody (ab1997) at 1/1000 dilution

All lanes : Human frontal cortex tissue lysate - whole

Lysates/proteins at 20 µg per lane.

Secondary

All lanes : IRDye® 800CW-conjugated donkey anti-rabbit IgG polyclonal at 1/18000 dilution

Performed under reducing conditions.

Predicted band size: 84 kDa

Observed band size: 65,80 kDa

Exposure time: 330 seconds

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