


Product datasheet

Anti-ADAM10 antibody ab39178

★★★★☆ 3 Abreviews 4 References 1 Image

Overview

Product name	Anti-ADAM10 antibody
Description	Rabbit polyclonal to ADAM10
Host species	Rabbit
Specificity	This antibody is specific for the Propeptide domain of ADAM10 and can detect the latent form of the enzyme. It will not recognize the furin-cleaved form of ADAM10.
Tested applications	Suitable for: WB, ICC/IF
Species reactivity	Reacts with: Mouse, Human Predicted to work with: Rat 
Immunogen	Synthetic peptide based on the Propeptide domain of human ADAM10. (Peptide available as ab41165 .)
Positive control	ICC/IF: HeLa cells.

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C or -80°C. Avoid freeze / thaw cycle.
Storage buffer	Preservative: 0.05% Sodium Azide Constituents: 50% Glycerol
Purity	Immunogen affinity purified
Purification notes	The antibody has been peptide-affinity purified.
Clonality	Polyclonal
Isotype	IgG

Applications

Our [Abpromise guarantee](#) covers the use of **ab39178** 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	★★★★☆	Use at an assay dependent concentration. Detects a band of approximately 98 kDa (predicted molecular weight: 84 kDa). Use dilution 1:1,000 when using colorimetric substrates such as BCIP/NBT, and 1:5,000 for chemiluminescent substrates. EDTA/EGTA treatment of tissues or lysates is required to see latent zymogen.
ICC/IF	★★★★★	Use at an assay dependent concentration.

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.

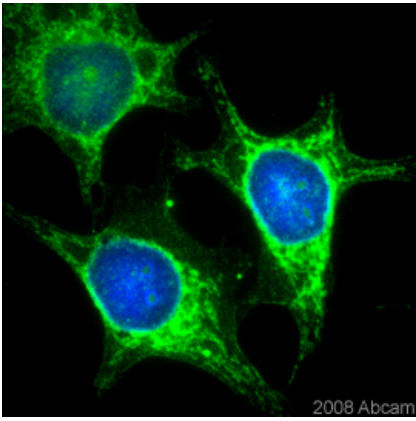
Post-translational modifications

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



Methanol fixed HeLa cells stained with ab39178 (10 µg/ml) for 1 hour at 22°C. For further details please refer to the Abreview.

Immunocytochemistry/ Immunofluorescence -

ADAM10 antibody - Propeptide domain (ab39178)

Image taken from an anonymous Abreview submitted in February 2008

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