abcam

Product datasheet

Anti-ADAM15 antibody [EPR5619] ab124698

Recombinant RabMAb

4 References 5 Images

Overview

Product name Anti-ADAM15 antibody [EPR5619]

Description Rabbit monoclonal [EPR5619] to ADAM15

Host species Rabbit

Tested applications Suitable for: WB, IHC-P

Unsuitable for: Flow Cyt,ICC/IF or IP

Species reactivity Reacts with: Human

Immunogen Synthetic peptide within Human ADAM15 aa 250-350 (extracellular). The exact sequence is

proprietary.

Database link: Q13444

Positive control SW480 cell lysate; Human colon tissue.

General notes This product is a recombinant monoclonal antibody, which offers several advantages including:

- High batch-to-batch consistency and reproducibility

- Improved sensitivity and specificity

- Long-term security of supply

- Animal-free production

For more information see here.

Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to **RabMAb**® **patents**.

Mouse, Rat: We have preliminary internal testing data to indicate this antibody may not react with

these species. Please contact us for more information.

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.

Avoid freeze / thaw cycle. Stable for 12 months at -20°C.

 $K_D = 5.86 \times 10^{-11} M$ Dissociation constant (K_D)

> 10⁻¹¹ LOW HIGH



Storage buffer pH: 7.20

Preservative: 0.01% Sodium azide

Constituents: 59% PBS, 40% Glycerol (glycerin, glycerine), 0.5% BSA

Purity Protein A purified

Clonality Monoclonal
Clone number EPR5619

Isotype IgG

Applications

The Abpromise quarantee

Our Abpromise guarantee covers the use of ab124698 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		1/1000 - 1/10000. Detects a band of approximately 90, 110 kDa (predicted molecular weight: 93 kDa).
IHC-P		1/800. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol. For unpurified use 1/250.00000 - 1/500.00000. See IHC antigen retrieval protocols.

Application notes Is unsuitable for Flow Cyt,ICC/IF or IP.

Target

Function

Active metalloproteinase with gelatinolytic and collagenolytic activity. Plays a role in the wound healing process. Mediates both heterotypic intraepithelial cell/T-cell interactions and homotypic T-cell aggregation. Inhibits beta-1 integrin-mediated cell adhesion and migration of airway smooth muscle cells. Suppresses cell motility on or towards fibronectin possibly by driving alpha-v/beta-1 integrin (ITAGV-ITGB1) cell surface expression via ERK1/2 inactivation. Cleaves E-cadherin in response to growth factor deprivation. Plays a role in glomerular cell migration. Plays a role in pathological neovascularization. May play a role in cartilage remodeling. May be proteolytically processed, during sperm epididymal maturation and the acrosome reaction. May play a role in sperm-egg binding through its disintegrin domain.

Tissue specificity

Expressed in colon and small intestine. Expressed in airway smooth muscle and glomerular mesangial cells (at protein level). Ubiquitously expressed. Overexpressed in atherosclerotic lesions. Constitutively expressed in cultured endothelium and smooth muscle. Expressed in chondrocytes. Expressed in airway smooth muscle and glomerular mesangial cells.

Sequence similarities

Contains 1 disintegrin domain.

Contains 1 EGF-like domain.

Contains 1 peptidase M12B domain.

Domain

The cytoplasmic domain interacts with endophilin I and sorting nexin 9.

Disintegrin domain binds to integrin alphaV-beta3.

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.

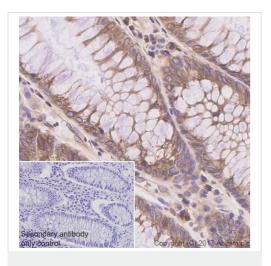
The precursor is cleaved by a furin endopeptidase. Phosphorylation increases association with PTKs.

Endomembrane system. Cell junction > adherens junction. Cell projection > cilium > flagellum. Cytoplasmic vesicle > secretory vesicle > acrosome. The majority of the protein is localized in a perinuclear compartment which may correspond to the trans-Golgi network or the late endosome. The pro-protein is the major detectable form on the cell surface, whereas the majority of the protein in the cell is processed.

Post-translational modifications

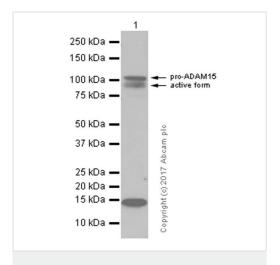
Cellular localization

Images



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-ADAM15 antibody
[EPR5619] (ab124698)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of human colon tissue sections labeling ADAM15 with purified ab124698 at 1:800 dilution (2.34 µg/ml). Heat mediated antigen retrieval was performed using **ab93684** (Tris/EDTA buffer, pH 9.0). Tissue was counterstained with hematoxylin. ImmunoHistoProbe one step HRP Polymer (ready to use). PBS instead of the primary antibody was used as the negative control.



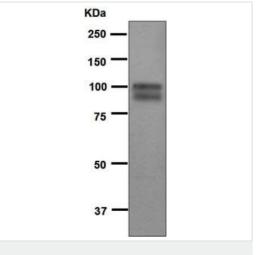
Western blot - Anti-ADAM15 antibody [EPR5619] (ab124698)

Anti-ADAM15 antibody [EPR5619] (ab124698) at 1/1000 dilution (purified) + SW480 (Human colorectal adenocarcinoma epithelial cell) whole cell lysates at 15 µg

Secondary

Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/20000 dilution (Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated)

Predicted band size: 93 kDa **Observed band size:** 110,90 kDa



Western blot - Anti-ADAM15 antibody [EPR5619] (ab124698)

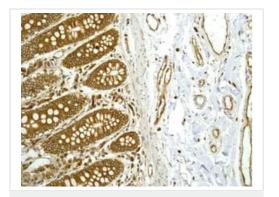
Anti-ADAM15 antibody [EPR5619] (ab124698) at 1/1000 dilution + SW480 cell lysate at 10 μg

Secondary

Goat anti-Rabbit HRP

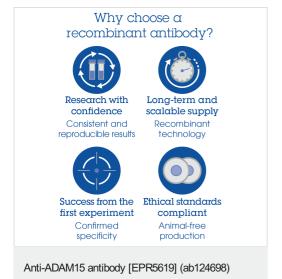
Predicted band size: 93 kDa

ab124698 also appears to recognize the pro-protein (110kDa). This image was produced using unpurified antibody.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-ADAM15 antibody
[EPR5619] (ab124698)

ab124698, at 1/250 dilution, staining ADAM15 in paraffinembedded Human colon tissue by immunohistochemistry. This image was produced using unpurified antibody.



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