**Product datasheet**

**Anti-ADAM17 antibody ab39162**

* ★★★☆☆ 9 Abreviews  19 References  4 Images *

### Overview

**Product name**  Anti-ADAM17 antibody  
**Description**  Rabbit polyclonal to ADAM17  
**Host species**  Rabbit  
**Specificity**  This antibody recognizes ADAM17, but does not react with other ADAMs.  
**Tested applications**  Suitable for: WB, IHC-P, ICC/IF, IP  
**Species reactivity**  Reacts with: Rat, Human, Pig  
**Immunogen**  Synthetic peptide corresponding to Human ADAM17. Only the full length ADAM17 contains the cytoplasmic epitope for this antibody.  
**Positive control**  WB: Rat vascular smooth muscle cell whole cell lysate. ICC/IF: Human pancreatic carcinoma cells; HeLa cells transiently overexpressing ADAM17. IHC-P: Human colon tissue.

### 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 long term.  
**Storage buffer**  Preservative: 0.01% Sodium azide  
Constituent: 50% Glycerol  
**Purity**  Immunogen affinity purified  
**Clonality**  Polyclonal  
**Isotype**  IgG

### Applications

Our Abpromise guarantee covers the use of ab39162 in the following tested applications.

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

<table>
<thead>
<tr>
<th>Application</th>
<th>Abreviews</th>
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<tr>
<th>Application</th>
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<tbody>
<tr>
<td>WB</td>
<td>★★★★☆☆☆☆</td>
<td>1/1000 - 1/5000. Detects a band of approximately 110 kDa (predicted molecular weight: 93 kDa). 1/1000 (when using colorimetric substrates such as BCIP/NBT) and 1/5000 (for chemiluminescent substrates). Higher concentrations of antibody may be needed for samples from more distantly related species. Detects a band of approximately 110 kDa in reduced Western blots of conditioned media or cell lysates. (Predicted molecular weight: 93 kDa). Note: EDTA/EGTA treatment of tissues or lysates is required to see latent zymogen. Dilution optimised using Chromogenic detection.</td>
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<tr>
<td>IHC-P</td>
<td>★★★★☆☆☆☆</td>
<td>Use a concentration of 4 µg/ml. Perform heat mediated antigen retrieval before commencing with IHC staining protocol.</td>
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<tr>
<td>ICC/IF</td>
<td>★★★★☆☆☆☆</td>
<td>Use at an assay dependent concentration.</td>
</tr>
<tr>
<td>IP</td>
<td>★★★★☆☆☆☆</td>
<td>Use at an assay dependent concentration.</td>
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**Target**

**Function**
Cleaves the membrane-bound precursor of TNF-alpha to its mature soluble form. Responsible for the proteolytical release of soluble JAM3 from endothelial cells surface. Responsible for the proteolytical release of several other cell-surface proteins, including p75 TNF-receptor, interleukin 1 receptor type II, p55 TNF-receptor, transforming growth factor-alpha, L-selectin, growth hormone receptor, MUC1 and the amyloid precursor protein. Also involved in the activation of Notch pathway.

**Tissue specificity**
Ubiquitously expressed. Expressed at highest levels in adult heart, placenta, skeletal muscle, pancreas, spleen, thymus, prostate, testes, ovary and small intestine, and in fetal brain, lung, liver and kidney.

**Sequence similarities**
Contains 1 disintegrin domain.
Contains 1 peptidase M12B domain.

**Domain**
Must be membrane anchored to cleave the different substrates. The cytoplasmic domain is not required for the this activity. Only the catalytic domain is essential to shed TNF and p75 TNFR. 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.
Phosphorylated. Stimulation by growth factor or phorbol 12-myristate 13-acetate induces phosphorylation of Ser-819 but decreases phosphorylation of Ser-791.

**Cellular localization**
Membrane.
Western blot - Anti-ADAM17 antibody (ab39162)

This image is courtesy of an anonymous Abreview.

Anti-ADAM17 antibody (ab39162) at 1/1000 dilution + Rat vascular smooth muscle cell whole cell lysate

**Secondary**
Donkey anti-rabbit Horse Radish Peroxidase at 1/2000 dilution

**Predicted band size:** 93 kDa

Immunocytochemistry/Immunofluorescence - Anti-ADAM17 antibody (ab39162)

This image is courtesy of an anonymous Abreview.

ab39162 staining ADAM17 in Human pancreatic carcinoma cells by ICC/IF (Immunocytochemistry/Immunofluorescence). Cells were fixed with methanol and blocked with 10% serum for 1 hour at 20°C. Samples were incubated with primary antibody (1/50 in PBS) for 1 hour at 25°C. An Alexa Fluor® 488-conjugated Goat anti-rabbit polyclonal was used as the secondary antibody (1/1000).

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-ADAM17 antibody (ab39162)

Ab39162 staining human normal colon. Staining is localised to membrane.
Left panel: with primary antibody at 4 ug/ml. Right panel: isotype control.
Sections were stained using an automated system DAKO Autostainer Plus, at room temperature. Sections were rehydrated and antigen retrieved with the Dako 3-in-1 AR buffer EDTA pH 9.0 in a DAKO PT Link. Slides were peroxidase blocked in 3% H2O2 in methanol for 10 minutes. They were then blocked with Dako

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Protein block for 10 minutes (containing casein 0.25% in PBS) then incubated with primary antibody for 20 minutes and detected with Dako Envision Flex amplification kit for 30 minutes. Colorimetric detection was completed with diaminobenzidine for 5 minutes. Slides were counterstained with Haematoxylin and coverslipped under DePeX. Please note that for manual staining we recommend to optimize the primary antibody concentration and incubation time (overnight incubation), and amplification may be required.

ab39162 was used to detect mouse ADAM17 transiently overexpressed in Hela cells. Ab39162 was incubated with the cells at 10 µg/ml for 1 hour at 22°C. For further details please refer to the Abreview.

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