Product datasheet

Anti-ADAM12 antibody ab28747

Overview

Product name: Anti-ADAM12 antibody
Description: Goat polyclonal to ADAM12
Host species: Goat
Specificity: This antibody is expected to recognise both the longer membrane bound form of human ADAM12 and the shorter soluble ADAM12 splice isoform. This antibody does not cross react with other ADAMS.

Tested applications: Suitable for: WB, IHC-P
Species reactivity: Reacts with: Human
Immunogen: Synthetic peptide: AARPLPVSPARALC, corresponding to N terminal amino acids 2-15 of ADAM12.

Positive control: Human heart lysate. Human prostate tissue.

Properties

Form: Liquid
Storage instructions: Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid freeze / thaw cycles.
Storage buffer: pH: 7.30
Preservative: 0.02% Sodium azide
 Constituents: 0.5% Tris buffered saline, 0.5% BSA
Purity: Immunogen affinity purified
Purification notes: Purified from goat serum by ammonium sulphate precipitation followed by antigen affinity chromatography using the immunizing peptide.
Clonality: Polyclonal
Isotype: IgG

Applications

Our Abpromise guarantee covers the use of ab28747 in the following tested applications.


**Function**

Involved in skeletal muscle regeneration, specifically at the onset of cell fusion. Also involved in macrophage-derived giant cells (MGC) and osteoclast formation from mononuclear precursors.

**Tissue specificity**

Isoform 1 is expressed in placenta and skeletal, cardiac, and smooth muscle. Isoform 2 seems to be expressed only in placenta or in embryo and fetus. Both forms were expressed in some tumor cells lines. Not detected in brain, lung, liver, kidney or pancreas.

**Sequence similarities**

Contains 1 disintegrin domain.
Contains 1 EGF-like domain.
Contains 1 peptidase M12B domain.

**Domain**

The cysteine-rich domain supports cell adhesion through syndecans and triggers signaling events that lead to beta-1 integrin-dependent cell spreading. In carcinomas cells the binding of this domain to syndecans does not allow the integrin-mediated cell spreading.

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**

Secreted and Cell membrane.

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**Application**

<table>
<thead>
<tr>
<th>Abreviews</th>
<th>Notes</th>
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<tbody>
<tr>
<td>WB</td>
<td>Use a concentration of 0.1 - 0.3 µg/ml. Detects a band of approximately 95 kDa (predicted molecular weight: 100 kDa). 1 hour primary incubation is recommended for this product.</td>
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<tr>
<td>IHC-P</td>
<td>Use a concentration of 2 µg/ml. Perform heat mediated antigen retrieval via the pressure cooker method before commencing with IHC staining protocol. PubMed: 19213876</td>
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**Target**

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**Images**
Western blot - Anti-ADAM12 antibody (ab28747) at 0.1 µg/ml + Human heart lysate (RIPA buffer, 30µg total protein per lane)

**Predicted band size:** 100 kDa  
**Observed band size:** 95 kDa  

*why is the actual band size different from the predicted?*

Primary incubation was for 1 hour.  
Detected using chemiluminescence.

ab28747 at 3.8µg/ml staining ADAM12 in human prostate tissue by Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections). Steamed antigen retrieval using citrate pH 6 was performed. AP staining used as detection method.

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

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