# abcam

# Product datasheet

# Anti-ADAM10 antibody [EPR5622] - BSA and Azide free ab242389



リコンピナント

RabMAb

# 画像数 5

#### 製品の概要

特記事項

製品名 Anti-ADAM10 antibody [EPR5622] - BSA and Azide free

製品の詳細 Rabbit monoclonal [EPR5622] to ADAM10 - BSA and Azide free

由来種 Rabbit

アプリケーション 適用あり: IP, WB

**種交差性 交差種:** Mouse, Rat, Human

免疫原 Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.

ポジティブ・コントロール WB: Wild type HAP1 whole cell lysate; U20S whole cell lysate. IP: LNCaP whole cell lysate.

ab242389 is the carrier-free version of ab124695.

Our <u>carrier-free</u> antibodies are typically supplied in a PBS-only formulation, purified and free of BSA, sodium azide and glycerol. The carrier-free buffer and high concentration allow for increased conjugation efficiency.

This conjugation-ready format is designed for use with fluorochromes, metal isotopes, oligonucleotides, and enzymes, which makes them ideal for antibody labelling, functional and cell-based assays, flow-based assays (e.g. mass cytometry) and Multiplex Imaging applications.

Use our **conjugation kits** for antibody conjugates that are ready-to-use in as little as 20 minutes with <1 minute hands-on-time and 100% antibody recovery: available for fluorescent dyes, HRP, biotin and gold.

This product is compatible with the Maxpar<sup>®</sup> Antibody Labeling Kit from Fluidigm, without the need for antibody preparation. Maxpar<sup>®</sup> is a trademark of Fluidigm Canada Inc.

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

1

#### 製品の特性

製品の状態 Liquid

保存方法 Shipped at 4°C. Store at +4°C. Do Not Freeze.

**バッファー** pH: 7.2

Constituent: PBS

キャリア・フリー はい

精製度 Protein A purified

**ポリモノ** モノクローナル **クローン名** EPR5622

アイソタイプ IgG

#### アプリケーション

**The Abpromise guarantee** <u>Abpromise保証は、</u>次のテスト済みアプリケーションにおけるab242389の使用に適用されます アプリケーションノートには、推奨の開始希釈率がありますが、適切な希釈率につきましてはご検討ください。

アプリケーション	Abreviews	特記事項
IP		Use at an assay dependent concentration.
WB		Use at an assay dependent concentration. Predicted molecular weight: 84 kDa.

#### ターゲット情報

機能 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.

組織特異性 Expressed in spleen, lymph node, thymus, peripheral blood leukocyte, bone marrow, cartilage,

chondrocytes and fetal liver.

配列類似性 Contains 1 disintegrin domain.

Contains 1 peptidase M12B domain.

ドメイン 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-

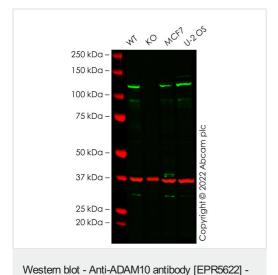
peptide release activates the enzyme.

翻訳後修飾 The precursor is cleaved by a furin endopeptidase.

**細胞内局在** 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.



BSA and Azide free (ab242389)

**All lanes :** Anti-ADAM10 antibody [EPR5622] (**ab124695**) at 1/1000 dilution

Lane 1 : Wild-type Jurkat cell lysate at 10 µg

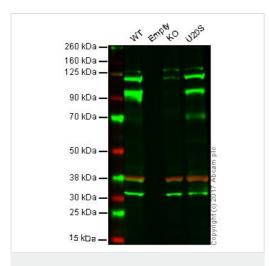
Lane 2: ADAM10 knockout Jurkat cell lysate at 10 µg

**Lane 3 :** MCF7 cell lysate at 20 μg **Lane 4 :** U-2 OS cell lysate at 20 μg

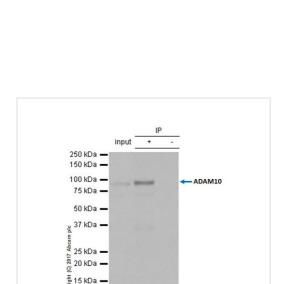
Performed under reducing conditions.

**Predicted band size:** 84 kDa **Observed band size:** 95-120 kDa

False colour image of Western blot: Anti-ADAM10 antibody [EPR5622] staining at 1/1000 dilution, shown in green; Mouse anti-GAPDH antibody [6C5] (ab8245) loading control staining at 1/20000 dilution, shown in red. In Western blot, ab124695 was shown to bind specifically to ADAM10. A band was observed at 95/120 kDa in wild-type Jurkat cell lysates with no signal observed at this size in ADAM10 knockout cell line. The band at 120 kDa is likely to be the precursor and the band at 90 kDa is likely to be the active form of ADAM10. To generate this image, wild-type and ADAM10 knockout Jurkat cell lysates were analysed. First, samples were run on an SDS-PAGE gel then transferred onto a nitrocellulose membrane. Membranes were blocked in 3 % milk in TBS-0.1 % Tween<sup>®</sup> 20 (TBS-T) before incubation with primary antibodies overnight at 4 °C. Blots were washed four times in TBS-T, incubated with secondary antibodies for 1 h at room temperature, washed again four times then imaged. Secondary antibodies used were Goat anti-Rabbit IgG H&L 800CW and Goat anti-Mouse IgG H&L 680RD at 1/20000 dilution.



Western blot - Anti-ADAM10 antibody [EPR5622] - BSA and Azide free (ab242389)



Immunoprecipitation - Anti-ADAM10 antibody [EPR5622] - BSA and Azide free (ab242389)

10 kDa

Lane 1: Wild type HAP1 whole cell lysate (40 µg)

Lane 2: Empty lane

Lane 3: ADAM10 knockout HAP1 whole cell lysate (40 µg)

Lane 4: U20S whole cell lysate (40 µg)

**Lanes 1 - 4:** Merged signal (red and green). Green - <u>ab124695</u> observed at 90 kDa. Red - loading control, <u>ab8245</u>, observed at 37 kDa.

ab124695 was shown to recognize ADAM10 when ADAM10 knockout samples were used, along with additional cross-reactive bands. Wild-type and ADAM10 knockout samples were subjected to SDS-PAGE. Ab124695 and ab8245 (Mouse anti GAPDH loading control) were incubated overnight at 4°C at 1/1000 dilution and 1/10000 dilution respectively. Blots were developed with Goat anti-Rabbit lgG H&L (IRDye® 800CW) preabsorbed ab216773 and Goat anti-Mouse lgG H&L (IRDye® 680RD) preabsorbed ab216776 secondary antibodies at 1/10000 dilution for 1 hour at room temperature before imaging.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (<u>ab124695</u>).

**ab124695** (purified) at 1:30 dilution (2ug) immunoprecipitating ADAM-10 in LNCaP (Human prostate carcinoma epithelial cell) whole cell lysate 10ug.

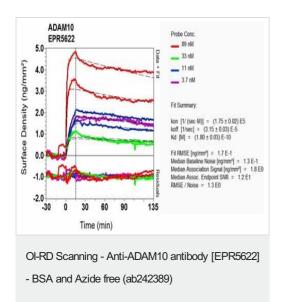
**Lane 1 (input):** LNCaP (Human prostate carcinoma epithelial cell) whole cell lysate 10ug

**Lane 2 (+):** <u>ab124695</u> & LNCaP (Human prostate carcinoma epithelial cell) whole cell lysate 10ug

Lane 3 (-): Rabbit monoclonal IgG (<u>ab172730</u>) instead of <u>ab170952</u> in HeLa LNCaP (Human prostate carcinoma epithelial cell) whole cell lysateFor western blotting, VeriBlot for IP Detection Reagent (HRP) (<u>ab131366</u>) was used for detection at 1:1000 dilution.

Blocking and diluting buffer: 5% NFDM/TBST.

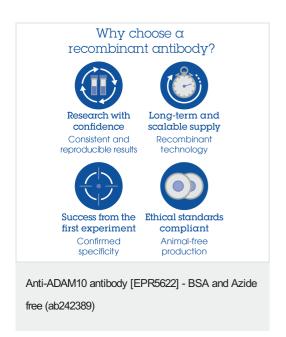
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab124695).



Equilibrium disassociation constant ( $K_D$ ) Learn more about  $K_D$ 

# Click here to learn more about K<sub>D</sub>

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab124695).



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