abcam

Product datasheet

Anti-ADAM10 antibody [EPR5622] ab124695

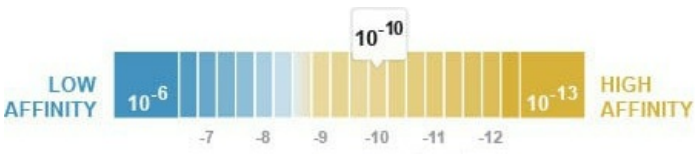
KO 評価済 リコンビナント RabMAb

4 Abreviews 34 References 画像数 8

製品の概要

製品名	Anti-ADAM10 antibody [EPR5622]
製品の詳細	Rabbit monoclonal [EPR5622] to ADAM10
由来種	Rabbit
アプリケーション	**適用あり:** WB, IP **適用なし:** IHC-P
種交差性	**交差種:** Mouse, Rat, Human
免疫原	Synthetic peptide within Human ADAM10 (C terminal). The exact sequence is proprietary.
ポジティブ・コントロール	Jurkat, RAW 264.7, U2OS, LnCaP and MCF-7 cell lysates.
特記事項	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**.

製品の特性

製品の状態	Liquid
保存方法	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long term. Avoid freeze / thaw cycle. Stable for 12 months at -20°C.
解離定数（K_D 値）	$K_D = 1.80 \times 10^{-10}$ M  **Learn more about K_D**
バッファー	pH: 7.2 Preservative: 0.01% Sodium azide

	Constituents: 40% Glycerol (glycerin, glycerine), 0.05% BSA, 59% PBS
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 **Abpromise保証は、** 次のテスト済みアプリケーションにおけるab124695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
WB	★★★★☆ (2)	1/1000 - 1/10000. Predicted molecular weight: 84 kDa.
IP		1/10 - 1/100.

追加情報 Is unsuitable for IHC-P.

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.

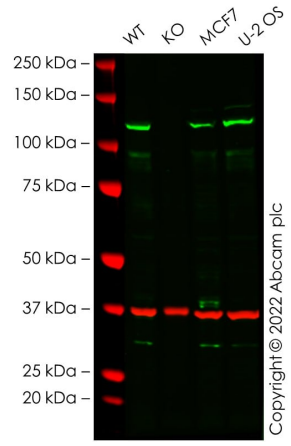
配列類似性 Contains 1 disintegrin domain.
Contains 1 peptidase M12B domain.

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.

画像



Western blot - Anti-ADAM10 antibody [EPR5622] (ab124695)

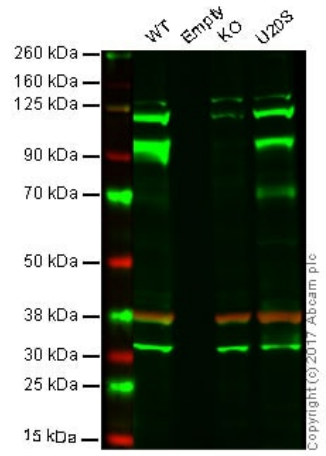
All lanes : Anti-ADAM10 antibody [EPR5622] (ab124695) at 1/1000 dilution

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® 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.

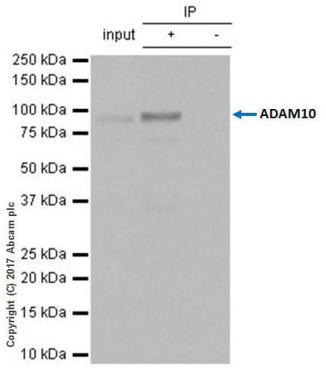


Western blot - Anti-ADAM10 antibody [EPR5622] (ab124695)

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)

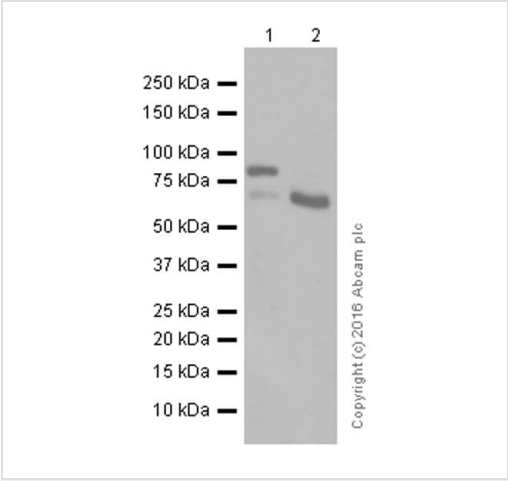
Lanes 1 - 4: Merged signal (red and green). Green - ab124695 observed at 90 kDa. Red - loading control, **ab8245**, observed at 37 kDa.

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 IgG H&L (IRDye® 800CW) preabsorbed **ab216773** and Goat anti-Mouse IgG H&L (IRDye® 680RD) preabsorbed **ab216776** secondary antibodies at 1/10000 dilution for 1 hour at room temperature before imaging.



Immunoprecipitation - Anti-ADAM10 antibody [EPR5622] (ab124695)

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 (+): ab124695 & LNCaP (Human prostate carcinoma epithelial cell) whole cell lysate 10ug
Lane 3 (-): Rabbit monoclonal IgG (**ab172730**) instead of **ab170952** in HeLa LNCaP (Human prostate carcinoma epithelial cell) whole cell lysateFor western blotting, VeriBlot for IP Detection Reagent (HRP) (**ab131366**) was used for detection at 1:1000 dilution.
Blocking and diluting buffer: 5% NFDM/TBST.



Western blot - Anti-ADAM10 antibody [EPR5622] (ab124695)

All lanes : Anti-ADAM10 antibody [EPR5622] (ab124695) at 0.05 µg/ml (Purified)

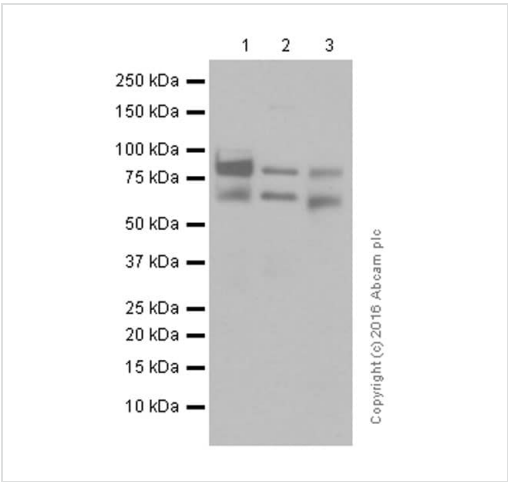
Lane 1 : RAW264.7 (Mouse Abelson murine leukemia virus-induced tumor macrophage) whole cell lysate
Lane 2 : Rat brain lysate

Lysates/proteins at 20 µg per lane.

Secondary
All lanes : Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**) at 1/20000 dilution

Predicted band size: 84 kDa

Blocking and diluting buffer: 5% NFDM/TBST



Western blot - Anti-ADAM10 antibody [EPR5622] (ab124695)

All lanes : Anti-ADAM10 antibody [EPR5622] (ab124695) at 0.09 µg/ml (Purified)

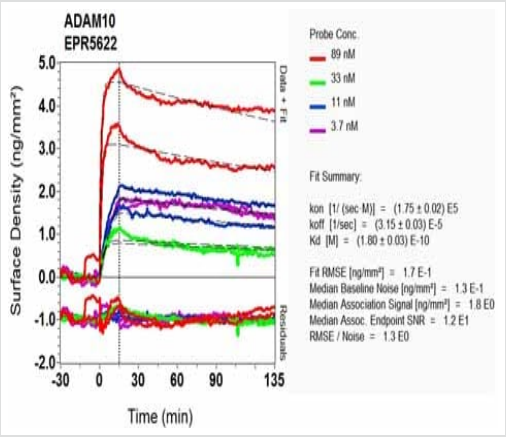
Lane 1 : Jurkat (Human T cell leukemia T lymphocyte) whole cell lysate
Lane 2 : MCF-7 (Human breast adenocarcinoma epithelial cell) whole cell lysate
Lane 3 : LNCaP (Human prostate carcinoma epithelial cell) whole cell lysate

Lysates/proteins at 20 µg per lane.

Secondary
All lanes : Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**) at 1/20000 dilution

Predicted band size: 84 kDa

Blocking and diluting buffer: 5% NFDM/TBST

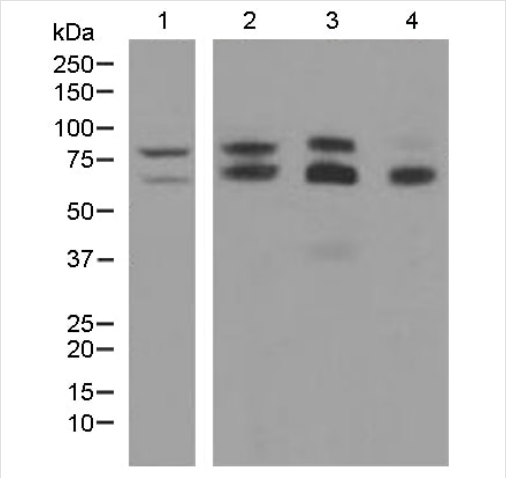


OI-RD Scanning - Anti-ADAM10 antibody [EPR5622] (ab124695)

Equilibrium disassociation constant (K_D)

Learn more about K_D

Click here to learn more about K_D



Western blot - Anti-ADAM10 antibody [EPR5622] (ab124695)

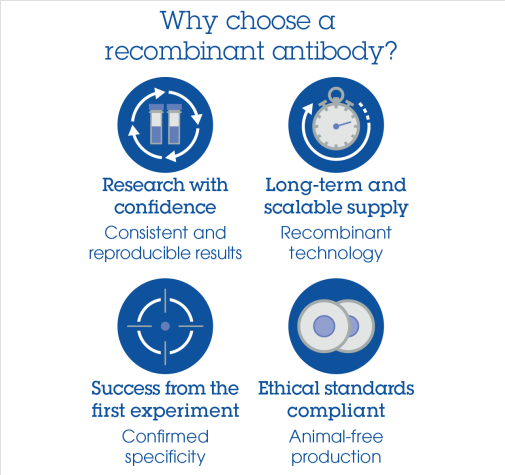
All lanes : Anti-ADAM10 antibody [EPR5622] (ab124695) at 1/1000 dilution

Lane 1 : Jurkat cell lysate
Lane 2 : RAW 264.7 cell lysate
Lane 3 : LnCaP cell lysate
Lane 4 : MCF-7 cell lysate

Lysates/proteins at 10 µg per lane.

Predicted band size: 84 kDa

84 kDa band is pro-ADAM10, smaller band at around 65 kDa is mature ADAM10 protein.



Anti-ADAM10 antibody [EPR5622] (ab124695)

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