abcam

Product datasheet

Anti-CD44 antibody [EPR1013Y] - BSA and Azide free ab216647

KO 評価済 リコンビナント RabMAb

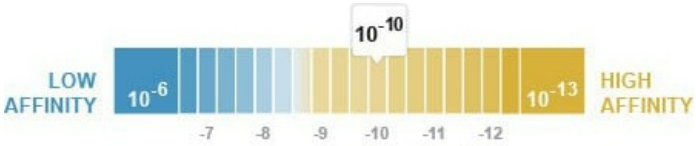
1 Abreviews 37 References 画像数 11

製品の概要

製品名	Anti-CD44 antibody [EPR1013Y] - BSA and Azide free
製品の詳細	Rabbit monoclonal [EPR1013Y] to CD44 - BSA and Azide free
由来種	Rabbit
アプリケーション	**適用あり:** WB, IHC-P **適用なし:** Flow Cyt,ICC/IF or IP
種交差性	**交差種:** Human **非交差種:** Mouse, Rat
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: MDA-MB-231, TF-1, HeLa and A549 cell lysates. IHC-P: Pancreatic and cervival cancer, breast and thyroid gland carcinoma, glioma, tonsil and skin tissues.
特記事項	ab216647 is the carrier-free version of **ab51037**. Our **carrier-free** 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® Antibody Labeling Kit from Fluidigm, without the need for antibody preparation. Maxpar® 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® 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. Do Not Freeze.
解離定数（K_D 値）	$K_D = 3.76 \times 10^{-10}$ M



Learn more about K_D

バッファー	pH: 7.20 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	EPR1013Y
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ab216647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		Use at an assay dependent concentration. Detects a band of approximately 82 kDa (predicted molecular weight: 82 kDa).
IHC-P		Use at an assay dependent concentration. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.

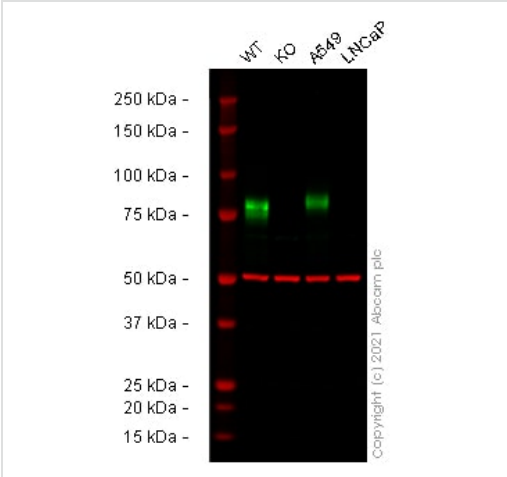
追加情報 Is unsuitable for Flow Cyt,ICC/IF or IP.

ターゲット情報

機能	Receptor for hyaluronic acid (HA). Mediates cell-cell and cell-matrix interactions through its affinity for HA, and possibly also through its affinity for other ligands such as osteopontin, collagens, and matrix metalloproteinases (MMPs). Adhesion with HA plays an important role in cell migration, tumor growth and progression. Also involved in lymphocyte activation, recirculation and homing, and in hematopoiesis. Altered expression or dysfunction causes numerous pathogenic phenotypes. Great protein heterogeneity due to numerous alternative splicing and post-translational modification events.
組織特異性	Isoform 10 (epithelial isoform) is expressed by cells of epithelium and highly expressed by carcinomas. Expression is repressed in neuroblastoma cells.

配列類似性	Contains 1 Link domain.
ドメイン	The lectin-like LINK domain is responsible for hyaluronan binding.
翻訳後修飾	Proteolytically cleaved in the extracellular matrix by specific proteinases (possibly MMPs) in several cell lines and tumors. N-glycosylated. O-glycosylated; contains more-or-less-sulfated chondroitin sulfate glycans, whose number may affect the accessibility of specific proteinases to their cleavage site(s). Phosphorylated; activation of PKC results in the dephosphorylation of Ser-706 (constitutive phosphorylation site), and the phosphorylation of Ser-672.
細胞内局在	Membrane.

画像



Western blot - Anti-CD44 antibody [EPR1013Y] - BSA and Azide free (ab216647)

All lanes : Anti-CD44 antibody [EPR1013Y] (**ab51037**) at 1/5000 dilution

Lane 1 : Wild-type HeLa cell lysate
Lane 2 : CD44 knockout HeLa cell lysate
Lane 3 : A549 cell lysate
Lane 4 : LNCaP cell lysate

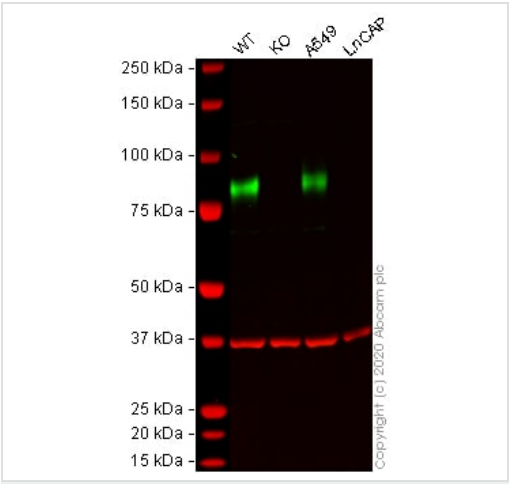
Lysates/proteins at 20 µg per lane.

Performed under reducing conditions.

Predicted band size: 82 kDa
Observed band size: 75-80 kDa

False colour image of Western blot: Anti-CD44 antibody [EPR1013Y] staining at 1/5000 dilution, shown in green; Mouse anti-Alpha Tubulin [DM1A] (**ab7291**) loading control staining at 1/20000 dilution, shown in red. In Western blot, **ab51037** was shown to bind specifically to CD44. A band was observed at 75-80 kDa in wild-type HeLa cell lysates with no signal observed at this size in CD44 knockout cell line **ab262515** (knockout cell lysate **ab263938**). To generate this image, wild-type and CD44 knockout HeLa 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 (IRDye® 800CW) preabsorbed (**ab216773**) and Goat anti-Mouse IgG H&L (IRDye® 680RD) preabsorbed (**ab216776**) at 1/20000 dilution.



Western blot - Anti-CD44 antibody [EPR1013Y] - BSA and Azide free (ab216647)

All lanes : Anti-CD44 antibody [EPR1013Y] (**ab51037**) at 1/5000 dilution

Lane 1 : Wild-type HeLa (Human epithelial cell line from cervix adenocarcinoma) whole cell lysate
Lane 2 : CD44 knockout HeLa (Human epithelial cell line from cervix adenocarcinoma) whole cell lysate
Lane 3 : A549 (Human lung carcinoma cell line) whole cell lysate
Lane 4 : LNCaP (Human prostate cancer cell line) whole cell lysate

Lysates/proteins at 20 µg per lane.

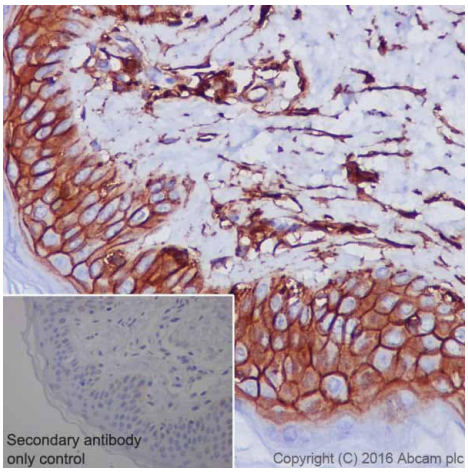
Performed under reducing conditions.

Predicted band size: 82 kDa
Observed band size: 80 kDa

This data was developed using the same antibody clone in a different buffer formulation (**ab51037**).

Lanes 1 - 4: Merged signal (red and green). Green - **ab51037** observed at 80 kDa. Red - loading control, **ab8245** (Mouse anti-GAPDH antibody [6C5]) observed at 37kDa.

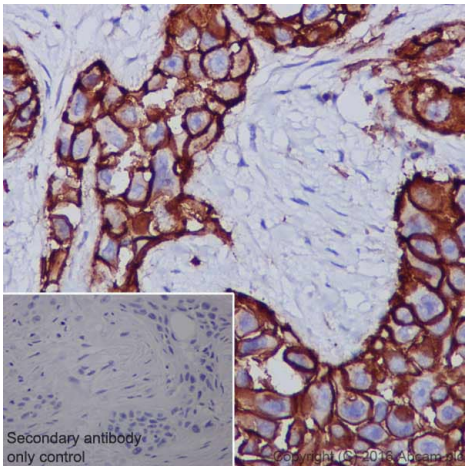
ab51037 was shown to react with CD44 in wild-type HeLa cells in western blot. Loss of signal was observed when CD44 knockout sample was used. Wild-type HeLa and CD44 knockout cell lysates were subjected to SDS-PAGE. Membranes were blocked in 3% milk in TBS-T (0.1% Tween®) before incubation with **ab51037** and **ab8245** (Mouse anti-GAPDH antibody [6C5]) overnight at 4°C at a 1 in 5000 dilution and a 1 in 20000 dilution respectively. Blots were incubated 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 in 20000 dilution for 1 hour at room temperature before imaging.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CD44 antibody [EPR1013Y] - BSA and Azide free (ab216647)

Immunohistochemical analysis of paraffin-embedded human skin tissue labeling CD44 with **ab51037** at 1/100 dilution followed by goat anti-rabbit IgG H&L (HRP) (**ab97051**, 1/500). The sample was counter stained with hematoxylin.

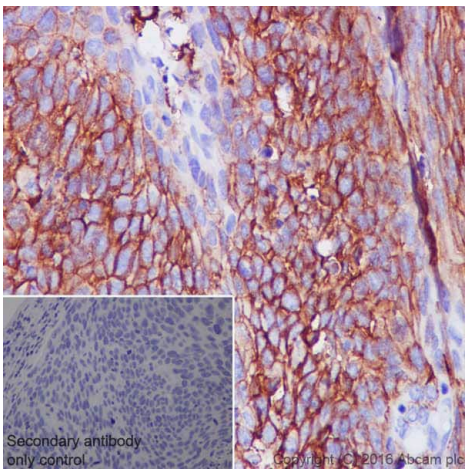
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab51037**).



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CD44 antibody [EPR1013Y] - BSA and Azide free (ab216647)

Immunohistochemical analysis of paraffin-embedded human pancreatic cancer tissue labeling CD44 with **ab51037** at 1/100 dilution followed by goat anti-rabbit IgG H&L (HRP) (**ab97051**, 1/500). The sample was counter stained with hematoxylin.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab51037**).



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CD44 antibody [EPR1013Y] - BSA and Azide free (ab216647)

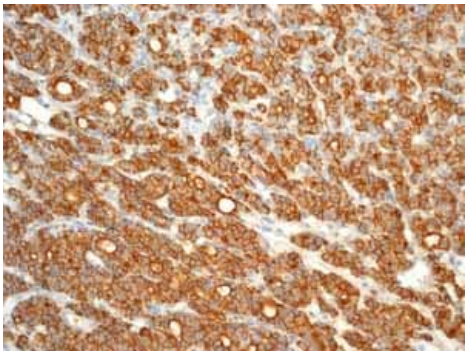
Immunohistochemical analysis of paraffin-embedded human cervical cancer tissue labeling CD44 with **ab51037** at 1/100 dilution followed by goat anti-rabbit IgG H&L (HRP) (**ab97051**, 1/500). The sample was counter stained with hematoxylin.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab51037**).

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CD44 antibody [EPR1013Y] - BSA and Azide free (ab216647)

ab51037 (1:100) showing positive staining in human Glioma tissue.

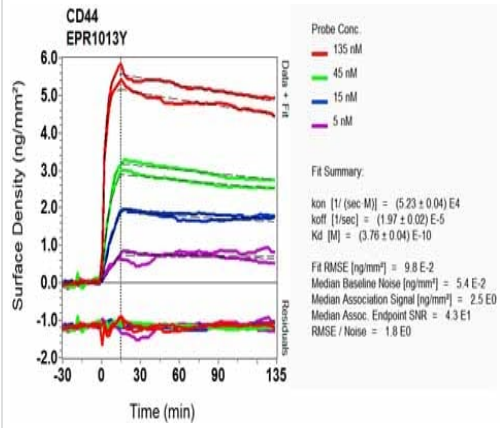
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab51037**).



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CD44 antibody [EPR1013Y] - BSA and Azide free (ab216647)

ab51037 (1:100) showing positive staining in human Thyroid gland carcinoma tissue.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab51037**).



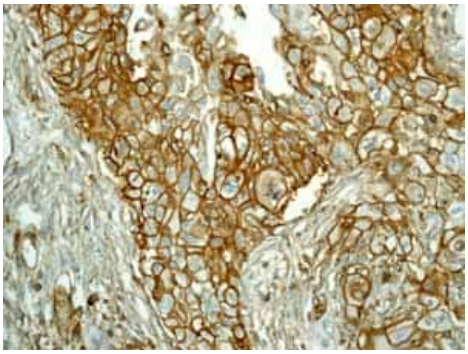
OI-RD Scanning - Anti-CD44 antibody [EPR1013Y] - BSA and Azide free (ab216647)

Equilibrium disassociation constant (K_D)

Learn more about K_D

Click here to learn more about K_D

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab51037**).

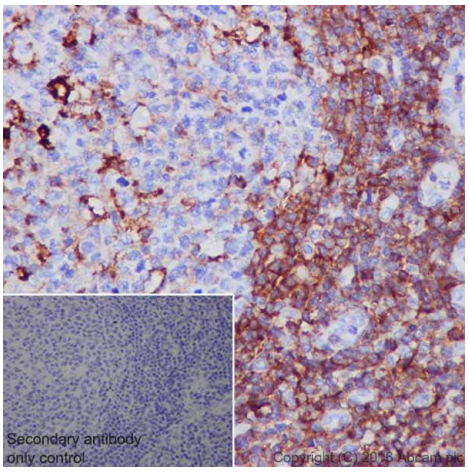


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CD44 antibody [EPR1013Y] - BSA and Azide free (ab216647)

This IHC data was generated using the same anti-CD44 antibody clone, EPR1013Y, in a different buffer formulation (cat# **ab51037**).

ab51037 (1:100) showing positive staining in human Breast carcinoma tissue.

Heat mediated antigen retrieval was performed with citrate buffer pH 6 before commencing with IHC staining protocol.

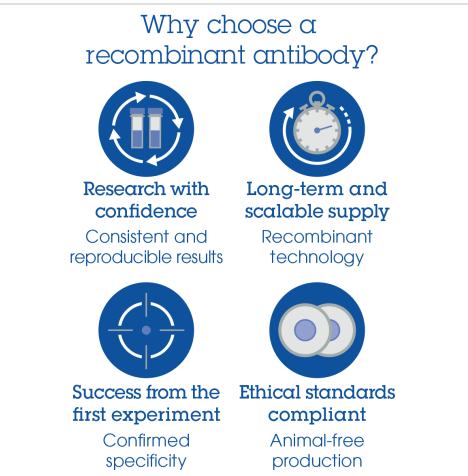


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CD44 antibody [EPR1013Y] - BSA and Azide free (ab216647)

This IHC data was generated using the same anti-CD44 antibody clone, EPR1013Y, in a different buffer formulation (cat# **ab51037**).

Immunohistochemical analysis of paraffin-embedded human tonsil tissue labeling CD44 with **ab51037** at 1/100 dilution followed by goat anti-rabbit IgG H&L (HRP) (**ab97051**, 1/500). The sample was counter stained with hematoxylin.

Heat mediated antigen retrieval was performed with citrate buffer pH 6 before commencing with IHC staining protocol.



Anti-CD44 antibody [EPR1013Y] - BSA and Azide free (ab216647)

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