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Product datasheet

Anti-CD44 antibody [SP37] ab101531

КО 評価済 リコンピナント RabMAb

★★★★★ 1 Abreviews 1 References 画像数 6

製品の概要

製品名	Anti-CD44 antibody [SP37]	
製品の詳細	Rabbit monoclonal [SP37] to CD44	
由来種	Rabbit	
アプリケーション	適用あり: IHC-P, WB	
種交差性	交差種: Human	
	交差が予測される動物種: Cow, Dog 🛛 📣	
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	IHC-P: Human esophageal carcinoma tissue. WB: HeLa and A549 cell lysates.	
特記事項	This product is FOR RESEARCH USE ONLY. For commercial use, please contact partnerships@abcam.com.	

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. Avoid freeze / thaw cycle.
バッファー	pH: 7.60 Preservative: 0.1% Sodium azide Constituents: PBS, 1% BSA
精製度	Protein A/G purified
特記事項(精製)	Purified from TCS by protein A/G.
ポリ/モノ	モノクローナル
クローン名	SP37
アイソタイプ	lgG

アプリケーション

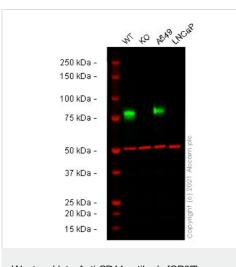
The Abpromise guarantee

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
IHC-P		1/100.Boil tissue section in citrate buffer pH 6.0 for 10 minutes followed by cooling at room temperature for 20 minutes.Incubate with primary antibody for 30 minutes at room temperature.
WB		Use at an assay dependent concentration. Predicted molecular weight: 80 kDa.

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	lsoform 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.



Western blot - Anti-CD44 antibody [SP37] (ab101531) All lanes : Anti-CD44 antibody [SP37] (ab101531) at 1/1000 dilution

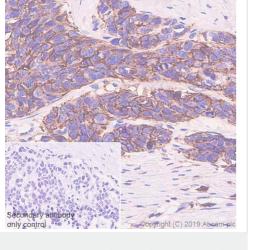
Lane 1 : Wild-type HeLa cell lysate Lane 2 : CD44 knockout HeLa cell lysate Lane 3 : A549 cell lysate Lane 4 : LNCaP cell lysate

Lysates/proteins at 20 µg per lane.

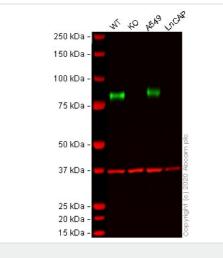
Performed under reducing conditions.

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

False colour image of Western blot: Anti-CD44 antibody [SP37] staining at 1/1000 dilution, shown in green; Mouse anti-Alpha Tubulin [DM1A] (ab7291) loading control staining at 1/20000 dilution, shown in red. In Western blot, ab101531 was shown to bind specifically to CD44. A band was observed at 75-80 kDa in wildtype 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 ŰC. 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.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-CD44 antibody [SP37] (ab101531) Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of Human esophageal carcinoma tissue sections labeling CD44 with Purified ab101531 at 1/100 dilution (1.03 µg/ml). Heat mediated antigen retrieval was performed Heat mediated antigen retrieval with sodium citrate buffer (pH 6.0, epitope retrieval solution 1) for 20mins. Rabbit specific IHC polymer detection kit HRP/DAB (**ab209101**) was used as the secondary antibody. Negative control: PBS instead of the primary antibody. Hematoxylin was used as a counterstain.



Western blot - Anti-CD44 antibody [SP37] (ab101531)

All lanes : Anti-CD44 antibody [SP37] (ab101531) at 1/1000 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.

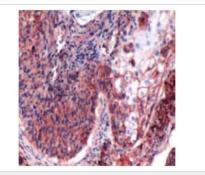
Performed under reducing conditions.

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

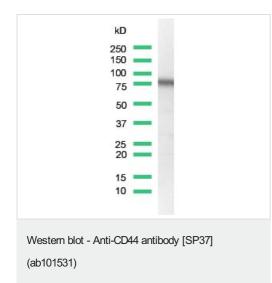
Lanes 1 - 4: Merged signal (red and green). Green - ab101531 observed at 80 kDa. Red - loading control, <u>ab8245</u> (Mouse anti-GAPDH antibody [6C5]) observed at 37kDa.

ab101531 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 ab101531 and **ab8245** (Mouse anti-GAPDH antibody [6C5]) overnight at 4°C at a

1 in 1000 dilution and a 1 in 20000 dilution respectively. Blots were incubated with Goat anti-Rabbit IgG H&L (IRDye[®] 800CW) preabsorbed (<u>ab216773</u>) and Goat anti-Mouse IgG H&L (IRDye[®] 680RD) preabsorbed (<u>ab216776</u>) secondary antibodies at 1 in 20000 dilution for 1 hour at room temperature before imaging.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-CD44 antibody [SP37] (ab101531) Formalin-fixed, paraffin-embedded human esophageal carcinoma tissue stained for CD44 with ab101531 at a 1/100 dilution in immunohistochemical analysis.



Anti-CD44 antibody [SP37] (ab101531) at 1/25 dilution + HeLa cell lysate

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

Why choose α recombinant antibody? Research with Long-term and confidence scalable supply Consistent and Recombinant reproducible results technology Success from the Ethical standards first experiment compliant Confirmed Animal-free specificity production

Anti-CD44 antibody [SP37] (ab101531)

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