# abcam

### Product datasheet

## Anti-CD44 antibody [BLR038F] ab243894



リコンビナント

5 References 画像数 8

#### 製品の概要

製品名 Anti-CD44 antibody [BLR038F]

製品の詳細 Rabbit monoclonal [BLR038F] to CD44

由来種 Rabbit

**適用あり:** Flow Cyt, ICC, IHC-P, IP, WB

種交差性 交差種: Mouse, Human

免疫原 Synthetic peptide within Human CD44 aa 700 to the C-terminus (C terminal). The exact

immunogen sequence used to generate this antibody is proprietary information. If additional detail on the immunogen is needed to determine the suitability of the antibody for your needs, please **contact** our Scientific Support team to discuss your requirements. NP\_000601.3 and Gene ID

960.

Database link: P16070-1

ポジティブ・コントロール WB: 786-O, KG-1, HeLa and A549 cell lysates. EL4 and BW5147.3 cell lysates. IHC-P: Human

head and neck squamous cell carcinoma tissue. ICC: HCT116 cells. Flow Cyt: HeLa cells.

特記事項 This product is sold under License from Bethyl Laboratories, Inc.

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.

**バッファー** pH: 7.8

Preservative: 0.09% Sodium azide

Constituents: 98% Borate buffered saline, 0.1% BSA

特記事項(精製) Recombinant antibody was purified from cell culture supernatant.

**ポリ/モノ** モノクローナル **クローン名** BLR038F

アイソタイプ IgG

**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ab243894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
Flow Cyt		Use 1µl for 10 <sup>6</sup> cells.
ICC		1/100 - 1/500.
IHC-P		1/100 - 1/500. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.
IP		Use at an assay dependent concentration. Use 20µl/mg lysate.
WB		1/1000.

#### 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

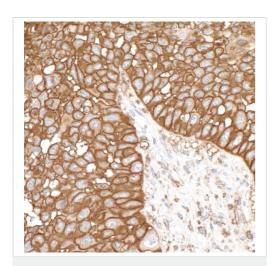
affect the accessibility of specific proteinases to their cleavage site(s).

Phosphorylated; activation of PKC results in the dephosphorylation of Ser-706 (constitutive

phosphorylation site), and the phosphorylation of Ser-672.

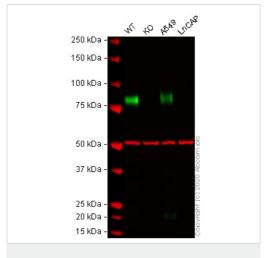
細胞内局在 Membrane.

#### 画像



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-CD44 antibody
[BLR038F] (ab243894)

Formalin-fixed, paraffin-embedded human head and neck squamous cell carcinoma tissue stained for CD44 using ab243894 at 1/500 dilution in immunohistochemical analysis. A HRP-conjugated goat anti-rabbit antibody was used as the secondary. DAB staining.



Western blot - Anti-CD44 antibody [BLR038F] (ab243894)

**All lanes :** Anti-CD44 antibody [BLR038F] (ab243894) 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.

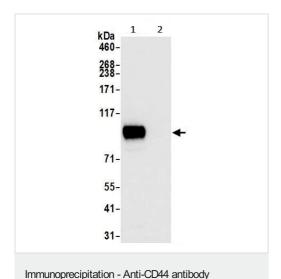
Performed under reducing conditions.

Observed band size: 80 kDa

**Lanes 1 - 4:** Merged signal (red and green). Green - ab243894 observed at 80 kDa. Red - loading control, <u>ab7291</u> (Mouse anti-Alpha Tubulin [DM1A]) observed at 55kDa.

ab243894 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<sup>®</sup>) before incubation with ab243894 and **ab7291** (Mouse anti-Alpha Tubulin [DM1A]) overnight at 4°C at a 1 in 1000 Dilution and a 1 in 20000 dilution respectively. Blots were incubated with Goat anti-Rabbit lgG H&L (IRDye<sup>®</sup> 800CW) preabsorbed (**ab216773**) and Goat anti-Mouse lgG H&L (IRDye<sup>®</sup> 680RD) preabsorbed (**ab216776**) secondary antibodies at 1 in 20000 dilution for 1 hour at room temperature before imaging.



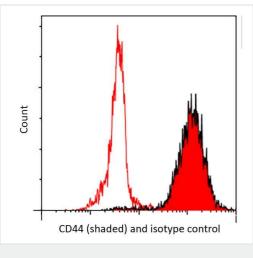
[BLR038F] (ab243894)

CD44 was immunoprecipitated from 1.0 mg HeLa (human epithelial cell line from cervix adenocarcinoma) whole cell lysate with ab243894 at 20  $\mu$ l per reaction. Western blot was performed on the immunoprecipitate using ab243894 at 1/1000 dilution.

Lane 1: ab243894 IP in HeLa whole cell lysate.

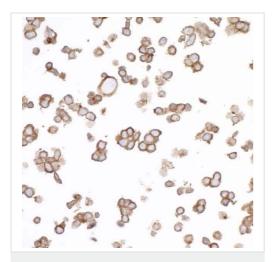
Lane 2: Control IgG in HeLa whole cell lysate.

Detection: Chemiluminescence with an exposure time of 3 seconds.



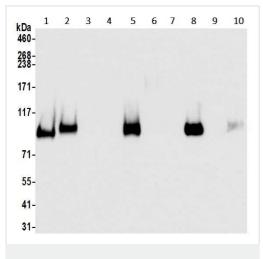
Flow Cytometry analysis of HeLa cells labeling CD44 with ab243894 (red). Cells were fixed in 4% formaldehyde and permeabilized with 90% methanol. Isotype control (unshaded). Secondary: DyLight® 650-conjugated goat anti-rabbit IgG.

Flow Cytometry - Anti-CD44 antibody [BLR038F] (ab243894)



Immunocytochemistry - Anti-CD44 antibody [BLR038F] (ab243894)

Formalin-fixed, paraffin-embedded HCT 116 (human colorectal carcinoma cell line) cells labeling CD44 using ab243894 at 1/500 dilution in ICC analysis. A HRP-conjugated goat-anti rabbit lgG was used as the secondary. DAB staining.



Western blot - Anti-CD44 antibody [BLR038F] (ab243894)

**All lanes :** Anti-CD44 antibody [BLR038F] (ab243894) at 1/1000 dilution

Lane 1: HeLa whole cell lysate

Lane 2: 786-O whole cell lysate

Lane 3: HEK-293T whole cell lysate

Lane 4: Jurkat-3 whole cell lysate

Lane 5: A549 whole cell lysate

Lane 6: MCF7 whole cell lysate

Lane 7: HepG2 whole cell lysate

Lane 8: KG-1 whole cell lysate

Lane 9 : RPMI 8226 whole cell lysate

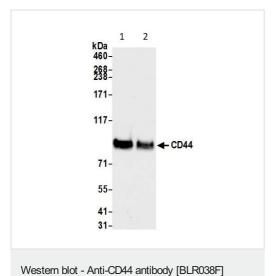
Lane 10: MOLT-4 whole cell lysate

Lysates/proteins at 50 µg per lane.

#### Secondary

All lanes: HRP-conjugated goat anti-rabbit lgG antibody

Detection: chemiluminescence with an exposure time of 3 seconds.



(ab243894)

**All lanes :** Anti-CD44 antibody [BLR038F] (ab243894) at 1/1000 dilution

Lane 1: BW5147.3 cell lysate

Lane 2: EL4 cell lysate

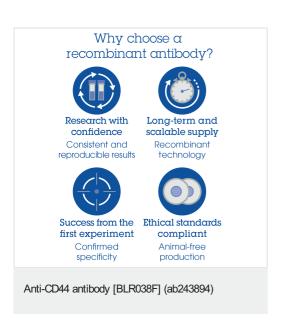
Lysates/proteins at 50 µg per lane.

**Secondary** 

All lanes: HRP-conjugated goat anti-rabbit lgG

Exposure time: 10 seconds

Detection method: Chemiluminescence



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