abcam

Product datasheet

Anti-CD276 antibody [EPR20115] ab219648



★★★★★ 1 Abreviews 4 References 画像数 11

製品の概要

製品名 Anti-CD276 antibody [EPR20115]

製品の詳細 Rabbit monoclonal [EPR20115] to CD276

由来種 Rabbit

アプリケーション 適用あり: WB, IHC-P

種交差性 交差種: Human

免疫原 Recombinant fragment. This information is proprietary to Abcam and/or its suppliers.

ポジティブ・コントロール WB: LNCaP, U-2OS, PC-3. 293T and MDA-MB-435S whole cell lysates; Human lung, skin and

placenta lysates. IHC-P: Human tonsil, placenta, hepatocellular carcinoma, lung carcinoma and

breast cancer tissues.

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.

バッファー pH: 7.2

Preservative: 0.01% Sodium azide

Constituents: 59% PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA

精製度 Protein A purified

ポリ/モノ モノクローナル クローン名 EPR20115

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ab219648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		1/1000. Detects a band of approximately 90-110 kDa (predicted molecular weight: 57 kDa).
IHC-P	★★★★☆ (1)	1/4000. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

ターゲット情報

May participate in the regulation of T-cell-mediated immune response. May play a protective role in tumor cells by inhibiting natural-killer mediated cell lysis as well as a role of marker for detection of neuroblastoma cells. May be involved in the development of acute and chronic transplant rejection and in the regulation of lymphocytic activity at mucosal surfaces. Could also play a key role in providing the placenta and fetus with a suitable immunological environment throughout pregnancy. Both isoform 1 and isoform 2 appear to be redundant in their ability to modulate CD4 T-cell responses. Isoform 2 is shown to enhance the induction of cytotoxic T-cells and selectively stimulates interferon gamma production in the presence of T-cell receptor signaling.

組織特異性

Ubiquitous but not detectable in peripheral blood lymphocytes or granulocytes. Weakly expressed in resting monocytes. Expressed in dendritic cells derived from monocytes. Expressed in epithelial cells of sinonasal tissue. Expressed in extravillous trophoblast cells and Hofbauer cells of the first trimester placenta and term placenta.

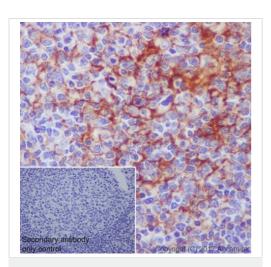
配列類似性

Belongs to the immunoglobulin superfamily. BTN/MOG family. Contains 2 lg-like C2-type (immunoglobulin-like) domains. Contains 2 lg-like V-type (immunoglobulin-like) domains.

細胞内局在

Membrane.

画像



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-CD276 antibody
[EPR20115] (ab219648)

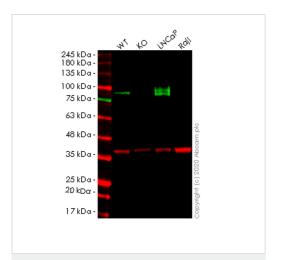
Immunohistochemical analysis of paraffin-embedded human tonsil tissue labeling CD276 with ab219648 at 1/4000 dilution, followed by Goat Anti-Rabbit $\lg G$ H&L (HRP) Ready to use.

 $\label{lem:membranous staining on dendritic cells of human tonsil is observed.}$

Counter stained with Hematoxylin.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit lgG H&L (HRP) Ready to use.

Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.



Western blot - Anti-CD276 antibody [EPR20115] (ab219648)

All lanes : Anti-CD276 antibody [EPR20115] (ab219648) at 1/1000 dilution

Lane 1: Wild-type HEK293T cell lysate

Lane 2: CD276 knockout HEK293T cell lysate

Lane 3: LNCaP cell lysate

Lane 4: Raji cell lysate

Lysates/proteins at 20 µg per lane.

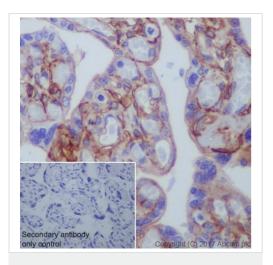
Secondary

All lanes : Goat anti-Rabbit lgG H&L (IRDye® 800CW) preadsorbed (ab216773) at 1/10000 dilution

Predicted band size: 57 kDa **Observed band size:** 90-110 kDa

Lanes 1-4: Merged signal (red and green). Green - ab219648 observed at 90-110 kDa. Red - loading control <u>ab8245</u> observed at 36 kDa.

ab219648 Anti-CD276 antibody [EPR20115] was shown to specifically react with CD276 in wild-type HEK293T cells. Loss of signal was observed when knockout cell line ab266658 (knockout cell lysate ab257097) was used. Wild-type and CD276 knockout samples were subjected to SDS-PAGE. ab219648 and Anti-GAPDH antibody [6C5] - Loading Control (ab8245) were incubated overnight at 4°C at 1 in 1000 dilution and 1 in 20000 dilution respectively. Blots were developed with Goat anti-Rabbit lgG H&L (IRDye® 800CW) preadsorbed (ab216773) and Goat anti-Mouse lgG H&L (IRDye® 680RD) preadsorbed (ab216776) secondary antibodies at 1 in 20000 dilution for 1 hour at room temperature before imaging.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-CD276 antibody
[EPR20115] (ab219648)

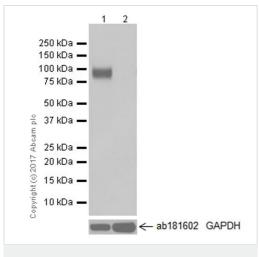
Immunohistochemical analysis of paraffin-embedded human placenta tissue labeling CD276 with ab219648 at 1/4000 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) Ready to use.

Cytoplasmic and membranous staining on vascular endothelial cells and trophoblast cells of human placenta is observed.

Counter stained with Hematoxylin.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit lgG H&L (HRP) Ready to use.

Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.



Western blot - Anti-CD276 antibody [EPR20115] (ab219648)

All lanes : Anti-CD276 antibody [EPR20115] (ab219648) at 1/1000 dilution

Lane 1: LNCaP (Human prostate cancer cell line) whole cell lysate

Lane 2: Raji (Human Burkitt's lymphoma cell line) whole cell lysate

Lysates/proteins at 10 µg per lane.

Secondary

All lanes : Goat Anti-Rabbit lgG H&L (HRP) (<u>ab97051</u>) at 1/100000 dilution

Predicted band size: 57 kDa **Observed band size:** 90-110 kDa

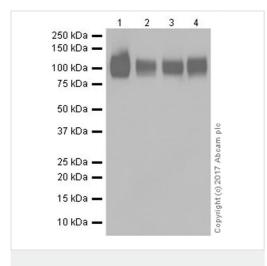
Exposure time: 3 seconds

Blocking/Dilution buffer: 5% NFDM/TBST.

Raji cells were used as a negative control for CD276 (B7-H3)

(PMID: 21344157).

Negative control: lane 2 Raji cell lysate



Western blot - Anti-CD276 antibody [EPR20115] (ab219648)

All lanes : Anti-CD276 antibody [EPR20115] (ab219648) at 1/2000 dilution

Lane 1 : U-2OS (Human bone osteosarcoma epithelial cell line) whole cell lysate

Lane 2 : PC-3 (Human prostate adenocarcinoma cell line) whole cell lysate

Lane 3 : 293T (Human epithelial cell line from embryonic kidney) whole cell lysate

Lane 4 : MDA-MB-435S (Human ductal carcinoma cell line) whole cell lysate

Lysates/proteins at 10 µg per lane.

Secondary

All lanes : Goat Anti-Rabbit lgG H&L (HRP) (<u>ab97051</u>) at 1/100000 dilution

Predicted band size: 57 kDa **Observed band size:** 90-110 kDa

Exposure time: 3 seconds

Blocking/Dilution buffer: 5% NFDM/TBST.

CD276 (B7-H3) has a molecular weight of about 90–100 kDa, depending on the glycosylation levels. [PMID:22473715].

All lanes : Anti-CD276 antibody [EPR20115] (ab219648) at 1/1000 dilution

Lane 1 : Human lung lysate
Lane 2 : Human skin lysate

Lane 3: Human placenta lysate

Lysates/proteins at 10 µg per lane.

1 2 3

250 kDa —
150 kDa —
100 kDa —
75 kDa —
37 kDa —
25 kDa —
20 kDa —
15 kDa —
10 kDa —
10 kDa —

Western blot - Anti-CD276 antibody [EPR20115] (ab219648)

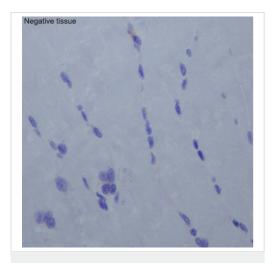
Secondary

All lanes : VeriBlot for IP Detection Reagent (HRP) (<u>ab131366</u>) at 1/4000 dilution

Predicted band size: 57 kDa **Observed band size:** 90-110 kDa

Blocking/Dilution buffer: 5% NFDM/TBST.

Exposure time: Lane 1/2: 30 seconds; Lane 3: 10 seconds.



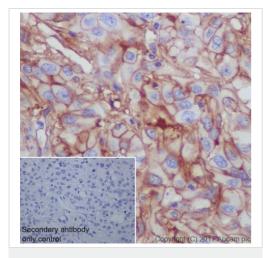
Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-CD276 antibody
[EPR20115] (ab219648)

Immunohistochemical analysis of paraffin-embedded human skeletal muscle tissue labeling CD276 with ab219648 at 1/4000 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) Ready to use.

Negative tissue: no staining on human skeletal muscle. [PMID: 18975328].

Counter stained with Hematoxylin.

Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-CD276 antibody
[EPR20115] (ab219648)

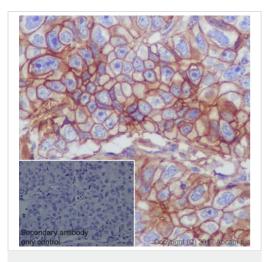
Immunohistochemical analysis of paraffin-embedded human hepatocellular carcinoma tissue labeling CD276 with ab219648 at 1/4000 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) Ready to use.

Membranous staining on human hepatocellular carcinoma is observed.

Counter stained with Hematoxylin.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit lgG H&L (HRP) Ready to use.

Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-CD276 antibody [EPR20115] (ab219648)

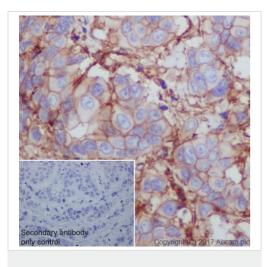
Immunohistochemical analysis of paraffin-embedded human lung carcinoma tissue labeling CD276 with ab219648 at 1/4000 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) Ready to use.

Membranous staining on human lung carcinoma is observed [PMID: 25609202].

Counter stained with Hematoxylin.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (HRP) Ready to use.

Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-CD276 antibody [EPR20115] (ab219648)

Immunohistochemical analysis of paraffin-embedded human breast cancer tissue labeling CD276 with ab219648 at 1/4000 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) Ready to use.

Membranous and cytoplasmic staining on human breast cancer tumor cells and stromal cells is observed.

Counter stained with Hematoxylin.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (HRP) Ready to use.

Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

Why choose a recombinant antibody?



Research with confidence Consistent and reproducible results





first experiment Confirmed specificity



production

Anti-CD276 antibody [EPR20115] (ab219648)

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

Our Abpromise to you: Quality guaranteed and expert technical support

- · Replacement or refund for products not performing as stated on the datasheet
- Valid for 12 months from date of delivery
- · Response to your inquiry within 24 hours
- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- · We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit https://www.abcam.co.jp/abpromise or contact our technical team.

Terms and conditions

• Guarantee only valid for products bought direct from Abcam or one of our authorized distributors