abcam

Product datasheet

Anti-CD276 antibody [EPNCIR122] - BSA and Azide free ab256585





RabMAb

7 图像

概述

产品名称 Anti-CD276抗体[EPNCIR122] - BSA and Azide free

描述 兔单克隆抗体[EPNCIR122] to CD276 - BSA and Azide free

宿主 Rabbit

经测试应用 适用于: IHC-Fr, WB, IP, Flow Cyt, ICC/IF

不适用于: IHC-P

种属反应性 与反应: Mouse, Human

免疫原 Recombinant full length protein. This information is proprietary to Abcam and/or its suppliers.

阳性对照 WB: LnCaP, CHO-K1 cells lysates transfected with human and mouse CD276. Flow Cyt:

HEK293 and THP1 cells. ICC/IF: HEK293 cells.

常规说明 ab256585 is the carrier-free version of ab134161.

This antibody was developed as part of a collaboration between Epitomics, the National Cancer

Institute's Center for Cancer Research and the lab of Brad St. Croix.

Our <u>carrier-free</u> 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

1

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**.

Rat: We have preliminary internal testing data to indicate this antibody may not react with this species. Please contact us for more information.

性能

形式 Liquid

存放说明 Shipped at 4°C. Store at +4°C. Do Not Freeze.

存储溶液 pH: 7.2

Constituent: PBS

纯**度** Protein A purified

克隆 单克隆

克隆编号 EPNCIR122

同种型 IgG

应用

The Abpromise guarantee Abpromise™承诺保证使用ab256585于以下的经测试应用

"应用说明"部分下显示的仅为推荐的起始稀释度;实际最佳的稀释度/浓度应由使用者检定。

应用	Ab评论	说明
IHC-Fr		Use at an assay dependent concentration.
WB		Use at an assay dependent concentration. Detects a band of approximately 110 kDa (predicted molecular weight: 57 kDa). Please check the parent ablD, ab134161 , for more information on dilutions.
IP		Use at an assay dependent concentration.
Flow Cyt		Use at an assay dependent concentration. <u>ab199376</u> - Rabbit monoclonal lgG, is suitable for use as an isotype control with this antibody.
ICC/IF		Use a concentration of 1 µg/ml.

应用说明 Is unsuitable for IHC-P.

靶标

功能

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.

组织特异性

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.

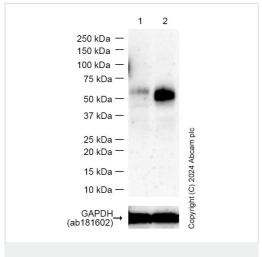
序列相似性

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.

细胞定位

Membrane.

图片



Western blot - Anti-CD276 antibody [EPNCIR122] - BSA and Azide free (ab256585)

All lanes : Anti-CD276 antibody [EPNCIR122] (ab134161) at 1/1000 dilution

Lane 1 : LLC (Mouse Lewis lung carcinoma cell) whole cell lysate (boiled)

Lane 2: LLC (Mouse Lewis lung carcinoma cell) whole cell lysate (unboiled)

Lysates/proteins at 20 µg per lane.

Secondary

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

Predicted band size: 57 kDa **Observed band size:** 45-66 kDa

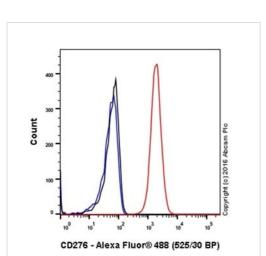
Exposure time: 180 seconds

Blocking and dilution buffer: 5% NFDM/TBST.

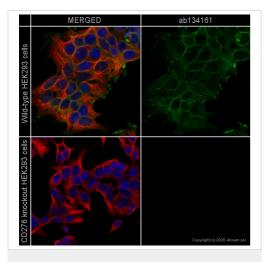
We recommend not to boil the samples after lysis to get desired WB results.

Mouse CD276 (B7-H3) has a molecular weight about 45–66 kDa, depending on the glycosylation levels [PMID: 34366684].

This data was developed using the same antibody clone in a



Flow Cytometry - Anti-CD276 antibody [EPNCIR122] - BSA and Azide free (ab256585)



Immunocytochemistry/ Immunofluorescence - Anti-CD276 antibody [EPNCIR122] - BSA and Azide free (ab256585)

different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab134161).

Overlay histogram showing THP-1 (human monocytic leukemia monocyte) cells stained with ab134161 (red line). The cells were fixed with 4% paraformaldehyde and then permeabilized with 90% methanol. The cells were incubated with the antibody (ab134161) at 1/80 dilution. The secondary antibody used was Alexa Fluor® 488 goat anti-rabbit lgG (H&L) (ab150077) at 1/2000 dilution. Isotype control antibody (black line) was rabbit monoclonal IgG (ab172730) used under the same conditions. Unlabelled sample (blue line) was also used as a control.

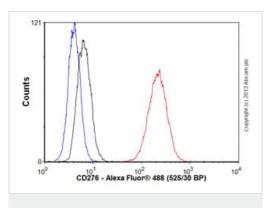
Performed using purified antibody.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab134161).

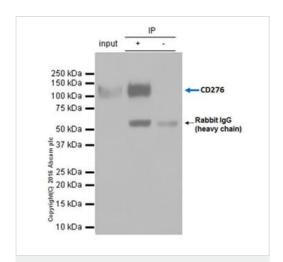
This data was developed using the same antibody clone in a different buffer formulation (ab134161).

ab134161 staining CD276 in wild-type HEK293 cells (top panel) and CD276 knockout HEK293 cells (ab266658) (bottom panel). The cells were fixed with 100% methanol (5 min) then permeabilized with 0.1% Triton X-100 for 5 minutes and then blocked with 1% BSA/10% normal goat serum/0.3M glycine in 0.1% PBS-Tween for 1h. The cells were then incubated with ab134161 at 1μg/ml concentration and ab7291 (Mouse monoclonal to alpha Tubulin) at 1/1000 dilution overnight at 4°C followed by a further incubation at room temperature for 1h with a goat secondary antibody to rabbit IgG (Alexa Fluor[®] 488) (ab150081) at 2 μg/ml (shown in green) and a goat secondary antibody to mouse IgG (Alexa Fluor® 594) (ab150120) at 2 µg/ml (shown in red). Nuclear DNA was labelled in blue with DAPI. Image was taken with a confocal microscope (Leica-Microsystems

TCS SP8).



Flow Cytometry - Anti-CD276 antibody [EPNCIR122]
- BSA and Azide free (ab256585)



Immunoprecipitation - Anti-CD276 antibody
[EPNCIR122] - BSA and Azide free (ab256585)

Overlay histogram showing THP1 cells stained with <u>ab134161</u> (red line). The cells were fixed with 80% methanol (5 min) and then permeabilized with 0.1% PBS-Tween for 20 min. The cells were then incubated in 1x PBS / 10% human serum / 0.3M glycine to block non-specific protein-protein interactions followed by the antibody (<u>ab134161</u>, 1/1000 dilution) for 30 min at 22°C. The secondary antibody used was Alexa Fluor® 488 goat anti-rabbit lgG (H&L) (<u>ab150077</u>) at 1/2000 dilution for 30 min at 22°C. Isotype control antibody (black line) was rabbit lgG (monoclonal) (0.1µg/1x10⁶ cells) used under the same conditions. Unlabelled sample (blue line) was also used as a control. Acquisition of >5,000 events were collected using a 20mW Argon ion laser (488nm) and 525/30 bandpass filter.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (<u>ab134161</u>).

CD276 was immunoprecipitated from 10 ug of HEK 293 (human embryonic kidney epithelial cell) whole cell lysate with **ab134161** at 1/40 diltuion. Western blot was permformed from the immunoprecipitate using ab 134161 at 1/1000 dilution. VeriBlot for IP Detection Reagent (HRP) (**ab131366**), was used for detection at 1/500 dilution.

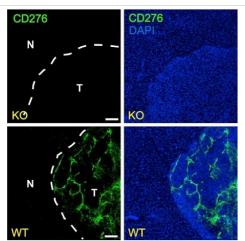
Lane 1: HEK 293 whole cell lysate 10 ug (Input).

Lane 2: ab134161 IP in HEK 293 whole cell lysate.

Lane 3: Rabbit monoclonal IgG ($\underline{ab172730}$) instead of $\underline{ab134161}$ in HEK 293 whole cell lysate

.Blocking/dilution buffer: 5% NFDM/TBSTPerformed using purified antibody.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab134161).



WT WT

Immunohistochemistry (Frozen sections) - Anti-

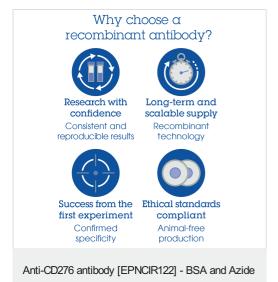
(ab256585) Image from Seaman S et al. Cancer Cell; 31; 501-515. Fig2.D doi:10.1016/j.ccell.2017.03.005 with permission

CD276 antibody [EPNCIR122] - BSA and Azide free

Immunohistochemistry of mouse MC38 colon liver metastasis.

Staining CD276 with <u>ab134161</u> (green). Normal tissue (N)/tumor tissue (T) margins are indicated by a white dash.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (<u>ab134161</u>).



free (ab256585)

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.cn/abpromise or contact our technical team.

Terms and conditions

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