

CD276 Antibody (C-term)
Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP12782b

Specification

CD276 Antibody (C-term) - Product Information

Application	IF, WB, IHC-P-Leica, FC,E
Primary Accession	Q5ZPR3
Other Accession	NP_001019907.1 , NP_079516.1
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Antigen Region	493-522

CD276 Antibody (C-term) - Additional Information

Gene ID 80381

Other Names

CD276 antigen, 4Ig-B7-H3, B7 homolog 3, B7-H3, Costimulatory molecule, CD276, CD276, B7H3

Target/Specificity

This CD276 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 493-522 amino acids from the C-terminal region of human CD276.

Dilution

IF~~1:25
WB~~1:1000
IHC-P-Leica~~1:500
FC~~1:25

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

CD276 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

CD276 Antibody (C-term) - Protein Information

Name CD276

Synonyms B7H3

Function 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.

Cellular Location

Membrane; Single-pass type I membrane protein

Tissue Location

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.

CD276 Antibody (C-term) - Protocols

Provided below are standard protocols that you may find useful for product applications.

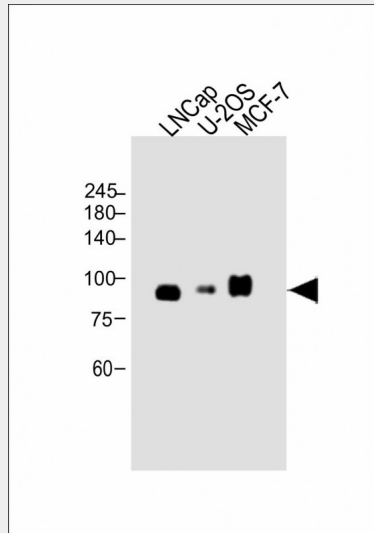
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

CD276 Antibody (C-term) - Images

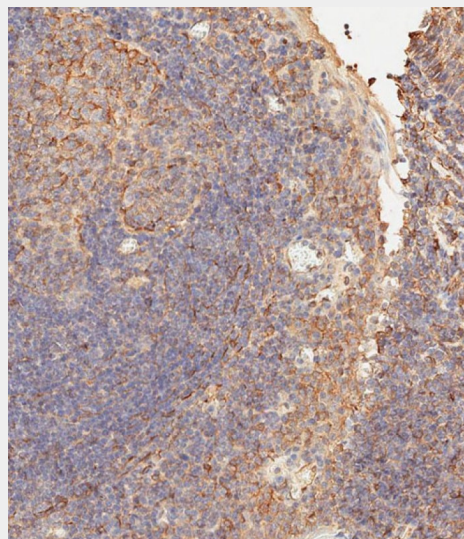


Immunofluorescent analysis of 4% paraformaldehyde-fixed, 0.1% Triton X-100 permeabilized

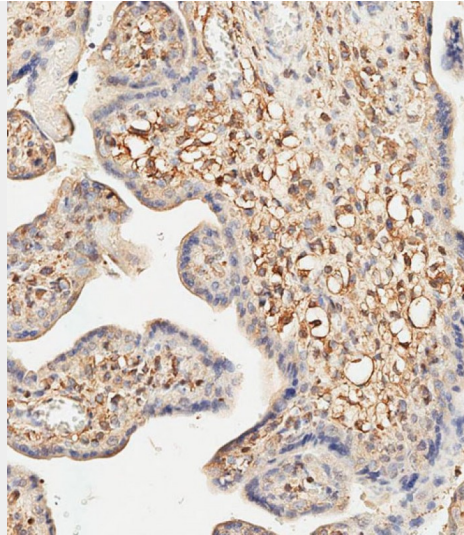
U-2OS cells labeling CD276 with AP12782b at 1/25 dilution, followed by Dylight® 488-conjugated goat anti-Rabbit IgG (OH191631) secondary antibody at 1/200 dilution (green). Immunofluorescence image showing membrane staining on U-2OS cell line. Cytoplasmic actin is detected with Dylight® 554 Phalloidin (1186255) at 1/500 dilution (red). The nuclear counter stain is DAPI (blue).



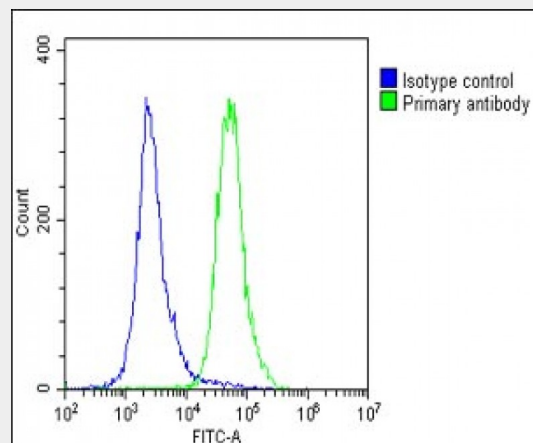
All lanes : Anti-CD276 Antibody (C-term) at 1:1000 dilution Lane 1: LNCap whole cell lysate Lane 2: U-2OS whole cell lysate Lane 3: MCF-7 whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 90 kDa Blocking/Dilution buffer: 5% NFD/MTBST.



Immunohistochemical analysis of paraffin-embedded human tonsil tissue using AP12782b performed on the Leica® BOND RXm. Samples were incubated with primary antibody(1/500) for 1 hours at room temperature. A undiluted biotinylated CRF Anti-Polyvalent HRP Polymer antibody was used as the secondary antibody.



Immunohistochemical analysis of paraffin-embedded human placenta tissue using AP12782b performed on the Leica® BOND RXm. Samples were incubated with primary antibody(1/500) for 1 hours at room temperature. A undiluted biotinylated CRF Anti-Polyvalent HRP Polymer antibody was used as the secondary antibody.



Overlay histogram showing U-2 OS cells stained with AP12782b(green line). The cells were fixed with 2% paraformaldehyde (10 min) and then permeabilized with 90% methanol for 10 min. The cells were then incubated in 2% bovine serum albumin to block non-specific protein-protein interactions followed by the antibody (AP12782b, 1:25 dilution) for 60 min at 37°C. The secondary antibody used was Goat-Anti-Rabbit IgG, DyLight® 488 Conjugated Highly Cross-Adsorbed(1583138) at 1/200 dilution for 40 min at 37°C. Isotype control antibody (blue line) was rabbit IgG1 (1µg/1x10⁶ cells) used under the same conditions. Acquisition of >10, 000 events was performed.

CD276 Antibody (C-term) - Background

Costimulatory B7 molecules (e.g., B7-1, or CD80; MIM 112203) signal through CD28 (MIM 186760) family molecules such as CD28, CTLA4 (MIM 123890), and ICOS (MIM 604558).

CD276 Antibody (C-term) - References

- Zhang, G., et al. J. Immunol. 185(6):3677-3684(2010)
- Sun, J., et al. Cancer Immunol. Immunother. 59(8):1163-1171(2010)
- Leitner, J., et al. Eur. J. Immunol. 39(7):1754-1764(2009)

Sugamata, R., et al. J. Immunol. 182(11):6799-6806(2009)
Loos, M., et al. BMC Cancer 9, 463 (2009) :