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CD276 Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP12782b

Product Information

Application	WB, FC, IF, IHC-P-Leica, E
Primary Accession	Q5ZPR3
Other Accession	NP_001019907.1, NP_079516.1
Reactivity	Human, Rat, Mouse
Predicted	Bovine, Canine
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB31111
Calculated MW	57235
Antigen Region	493-522

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	WB~~1:1000 FC~~1:25 IF~~1:25 IHC-P-Leica~~1:500 E~~Use at an assay dependent concentration.
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.

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.

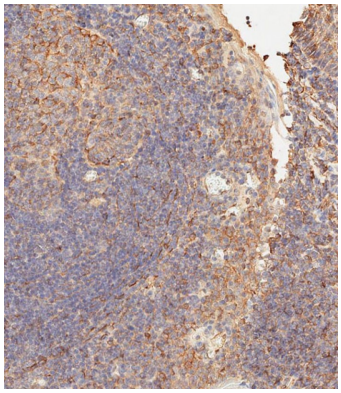
Background

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).

References

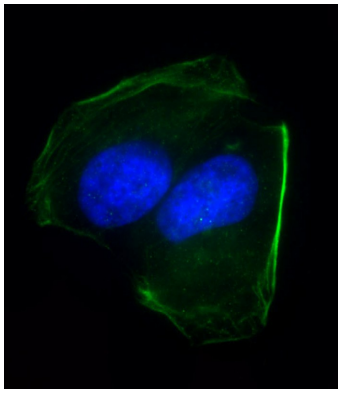
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Sun, J., et al. Cancer Immunol. Immunother. 59(8):1163-1171(2010)
Leitner, J., et al. Eur. J. Immunol. 39(7):1754-1764(2009)
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Images

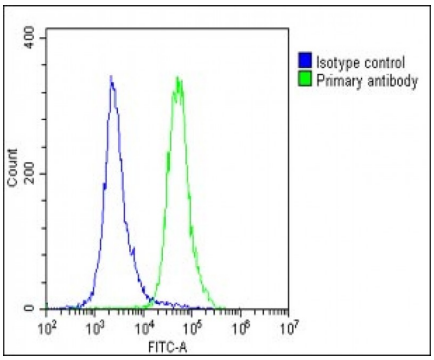


Immunohistochemical analysis of paraffin-embedded human tonsil tissue using AP12782b performed on the Leica® BOND RXm. Samples were incubated with primary antibody(1/500) for 1 hours at room temperature. A undiluted biotinylated CRF Anti-Polyvalent HRP Polymer antibody was used as the secondary antibody.

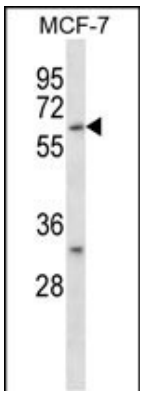
Immunofluorescent analysis of 4% paraformaldehyde-fixed, 0. 1% Triton X-100 permeabilized U-2OS cells labeling CD276 with AP12782b at 1/25 dilution, followed by Dylight® 488-conjugated goat anti-Rabbit IgG (OH191631) secondary antibody at 1/200 dilution (green). Immunofluorescence image showing membrance 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).



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 icubated in 2% bovine serum albumin to block non-specific protein-protein interactions followed by the antibody (AP12782b, 1:25 dilution) for 60 min at 37ºC. The secondary antibody used was Goat-Anti-Rabbit IgG, DyLight® 488 Conjugated Highly Cross-Adsorbed(1583138) at 1/200 dilution for 40 min at 37ºC. Isotype control antibody (blue line) was rabbit IgG1 (1µg/1x10^6 cells) used under the same conditions. Acquisition of >10, 000 events was performed.



CD276 Antibody (C-term) (Cat. #AP12782b) western blot analysis in MCF-7 cell line lysates (35ug/lane).This demonstrates the CD276 antibody detected the CD276 protein (arrow).

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.