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CD276 Antibody

Purified Mouse Monoclonal Antibody
Catalog # AO1455a

Product Information

Application	WB, IHC, FC, E
Primary Accession	Q5ZPR3
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Clone Names	6A1
Isotype	IgG1
Calculated MW	57235
Description	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). 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.
Immunogen	Purified recombinant fragment of human CD276 expressed in E. Coli.
Formulation	Ascitic fluid containing 0.03% sodium azide.

Additional Information

Gene ID	80381
Other Names	CD276 antigen, 4Ig-B7-H3, B7 homolog 3, B7-H3, Costimulatory molecule, CD276, CD276, B7H3
Dilution	WB~~1/500 - 1/2000 IHC~~1/200 - 1/1000 FC~~1/200 - 1/400 E~~N/A
Storage	Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	CD276 Antibody 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.

References

1. Genome Res. 2004 Oct;14(10B):2121-7. 2. Cell Mol Immunol. 2005 Aug;2(4):307-11.

Images

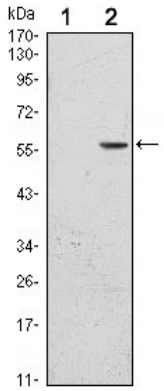


Figure 1: Western blot analysis using CD276 mAb against HEK293 (1) and CD276(AA: 30-130)-hIgGFc transfected HEK293 (2) cell lysate.

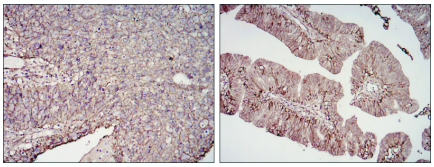
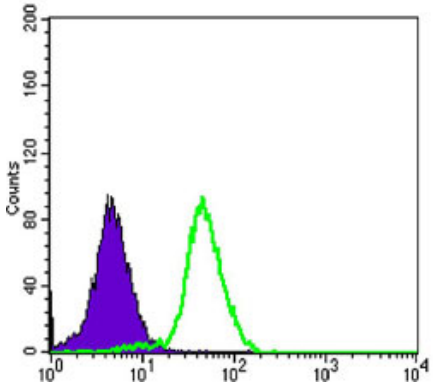


Figure 2: Immunohistochemical analysis of paraffin-embedded cervical cancer tissues (left) and ovarian cancer tissues (right) using CD276 mouse mAb with DAB staining.

Figure 3: Flow cytometric analysis of PC-3 cells using CD276 mouse mAb (green) and negative control (purple).



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