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CD276 Antibody
Purified Mouse Monoclonal Antibody
Catalog # AO1455a

Specification

CD276 Antibody - Product Information

Application	**WB, IHC, FC, E**
Primary Accession	Q5ZPR3
Reactivity	**Human**
Host	**Mouse**
Clonality	**Monoclonal**
Isotype	**IgG1**
Calculated MW	**57kDa KDa**

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.

CD276 Antibody - 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.

CD276 Antibody - 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 - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

CD276 Antibody - Images

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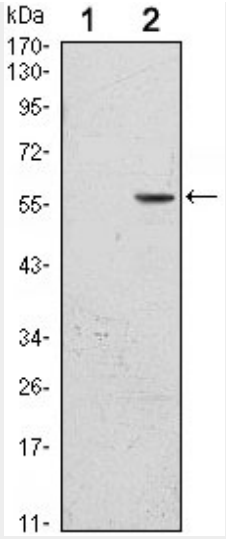

Figure 1: Western blot analysis using CD276 mAb against HEK293 (1) and CD276(AA: 30-130)-hIgGFc transfected HEK293 (2) cell lysate.

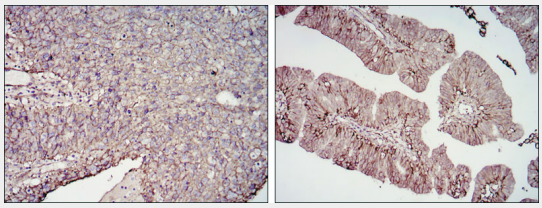

Figure 2: Immunohistochemical analysis of paraffin-embedded cervical cancer tissues (left) and ovarian cancer tissues (right) using CD276 mouse mAb with DAB staining.

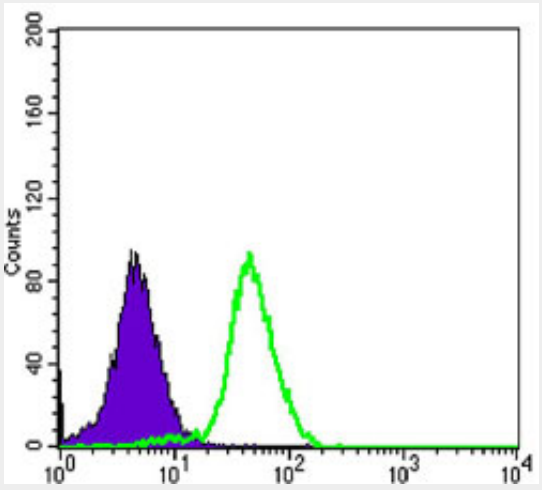

Figure 3: Flow cytometric analysis of PC-3 cells using CD276 mouse mAb (green) and negative control (purple).

CD276 Antibody - References

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