

# CD276 Antibody

Purified Mouse Monoclonal Antibody (Mab) Catalog # AM8677b

## **Product Information**

Application	WB, IHC-P, E
Primary Accession	<u>Q5ZPR3</u>
Reactivity	Human
Predicted	Human
Host	Mouse
Clonality	monoclonal
Isotype	IgG1,к
Clone Names	2009CT652.35.9
Calculated MW	57235

### **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 a mouse immunized with a recombinant protein from the human region of human CD276.
Dilution	WB~~1:4000 IHC-P~~1:100~500 E~~Use at an assay dependent concentration.
Format	Purified monoclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein G column, followed by dialysis against PBS.
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 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

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.

### References

Chapoval A.I.,et al.Nat. Immunol. 2:269-274(2001). Steinberger P.,et al.J. Immunol. 172:2352-2359(2004). Clark H.F.,et al.Genome Res. 13:2265-2270(2003). Ota T.,et al.Nat. Genet. 36:40-45(2004). Otsuki T.,et al.DNA Res. 12:117-126(2005).

### Images



All lanes: Anti-CD276 Antibody at 1:1000 dilution Lane 1: LNCAP whole cell lysate Lane 2: U-2OS whole cell lysate Lane 3: Human placenta lysate Lane 4: MCF-7 whole cell lysate Lysates/proteins at 20 µg per lane. Secondary: Goat Anti-Mouse IgG, (H+L), Peroxidase conjugated (ASP1613) at 1/8000 dilution. Observed band size: 90 KDa Blocking/Dilution buffer: 5% NFDM/TBST.

Immunohistochemical analysis of CD276 Antibody in 293T(untransfected) cell sections. Cell was fixed with formaldehyde and blocked with super block for 10 minutes at room temperature; antigen retrieval was by heat mediation with a EDTA buffer (pH9. 0). Samples were



incubated with primary antibody (1:500) for 1 hours at room temperature. A undiluted biotinylated goat polyvalent antibody was used as the secondary antibody.

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