

CD276 Antibody
Catalog # ASC12121**Specification**

CD276 Antibody - Product Information

Application	WB, IHC-P, IF, E
Primary Accession	Q5ZPR3
Other Accession	NP_001019907
Reactivity	Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Calculated MW	Predicted: 35, 43, 57 kDa
	Observed: 59 kDa KDa

CD276 Antibody - Additional Information

Gene ID	80381
Alias Symbol	CD276
Other Names	
CD276 Antibody: CD276 molecule, B7H3, B7-H3, B7RP-2, 4Ig-B7-H3	

Target/Specificity

At least three antibodies are known to exist; this antibody will detect all three isoforms.

Reconstitution & Storage

CD276 antibody can be stored at 4°C for three months and -20°C, stable for up to one year. As with all antibodies care should be taken to avoid repeated freeze thaw cycles. Antibodies should not be exposed to prolonged high temperatures.

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 Cytometry](#)
- [Cell Culture](#)

CD276 Antibody - Images**CD276 Antibody - Background**

CD276, also known as B7-H3, was initially identified as a member of the B7 family of proteins through its homology with previously identified B7 molecules (1). CD276 mRNA is widely expressed, but its protein expression is usually rather low (2). CD276 has been shown to play a role in both the costimulation as well as the coinhibition of T cell response (3). In a similar fashion, CD276 plays a critical role in the control of antitumor immune responses in some cases, while in others appears to mediate antitumor immunity (4). It thus joins other immune checkpoint proteins as a possible therapeutic target for at least a subset of cancers.

CD276 Antibody - References

Chapoval AI, Ni J, Lau JS, et al. B7-H3: a costimulatory molecule for T cell activation and IFN-gamma production. Nat Immunol 2001; 2:269-74. Sun M, Richards S, Prasad DV, et al. Characterization of mouse and human B7-H3 genes. J Immunol 2002; 168:6294-7. Yi KH and Chen L. Fine tuning the immune response through B7-H3 and B7-H4. Immunol Rev 2009; 229:145-51. Wang L, Kang FB, and Shan BE. B7-H3-mediated tumor immunology: friend or foe?. Int J Cancer 2014; 134:2764-71.