

CD276 / B7-H3 Antibody (clone MIH42)

Mouse Monoclonal Antibody Catalog # ALS12348

Specification

CD276 / B7-H3 Antibody (clone MIH42) - Product Information

Application Primary Accession Reactivity Host Clonality Calculated MW Dilution IHC-P, FC, IHC-F <u>O5ZPR3</u> Human Mouse Monoclonal 57kDa KDa IHC-P~~N/A FC~~1:10~50 IHC-F~~N/A

CD276 / B7-H3 Antibody (clone MIH42) - Additional Information

Gene ID 80381

Other Names CD276 antigen, 4Ig-B7-H3, B7 homolog 3, B7-H3, Costimulatory molecule, CD276, CD276, B7H3

Target/Specificity

Detects CD276, a member of the B7 family of co-stimulatory molecules also known as B7-H3. CD276 is a type I transmembrane protein that induces the proliferation of CD4+ and CD8+ T cells, enhances the generation of cytotoxic T cells and selectively st ...

Reconstitution & Storage

+4°C or -20°C, Avoid repeated freezing and thawing.

Precautions CD276 / B7-H3 Antibody (clone MIH42) is for research use only and not for use in diagnostic or therapeutic procedures.

CD276 / B7-H3 Antibody (clone MIH42) - 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.

Volume Array

CD276 / B7-H3 Antibody (clone MIH42) - Protocols

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

- <u>Western Blot</u>
- <u>Blocking Peptides</u>
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

CD276 / B7-H3 Antibody (clone MIH42) - Images



Anti-B7-H3 antibody IHC of human placenta. CD276 / B7-H3 Antibody (clone MIH42) - Background

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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.

CD276 / B7-H3 Antibody (clone MIH42) - 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).