



CD276 (PTR1401) Mouse mAb

Catalog No	YP-mAb-18965
Isotype	IgG
Reactivity	Human,Mouse,Rat
Applications	WB;IF;ELISA
Gene Name	CD276
Protein Name	CD276 antigen
Immunogen	AA range: 100-200
Specificity	This antibody detects endogenous levels of CD276 protein.
Formulation	PBS, 50% glycerol, 0.05% Proclin 300, 0.05%BSA
Source	Monoclonal,Mouse,IgG
Purification	The antibody was affinity-purified from ascites by affinity-chromatography using specific immunogen.
Dilution	WB 1:500-2000; IF 1:100-500; ELISA 1:1000-5000;
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	CD276 ; B7H3 ; PSEC0249 ; CD276 antigen ; 4lg-B7-H3 ; B7 homolog 3 ; B7-H3 ; Costimulatory molecule ; CD276
Observed Band	110kD
Calculated Molecular Weight	57kD
Cell Pathway	Membrane
Tissue Specificity	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.
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.,induction:By LPS in monocytes and by ionomycin in T and B lymphocytes. Up-regulated in cells mediating rejection of human transplants.,miscellaneous:B7-H3 locus underwent genomic duplication leading to tandemly repeated immunoglobulin-like V and C domains (VC domains). The dominantly expressed human B7-H3 isoform contains tandemly duplicated VC domains. In contrast, mouse B7-H3 transcript contains only one single VC domain form due to an exon structure corresponding to V domain-(pseudoexon C)-(pseudoexon V)-C domain. This duplication appearing in primates is suggested to be very recent supporting a model of multiple independent emergence of tandem VC repeats within human and monkey species.,similarity:Belongs to the immunoglobulin superfamily. BTN/MOG family.,similarity:Contains 2 Ig-like C2-type (immunoglobulin-like) domains.,similarity:Contains 2 Ig-like V-type (immunoglobulin-like) domains.,subunit:Interacts with TREML2 and this interaction enhances T-cell activation.,tissue specificity: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

The protein encoded by this gene belongs to the immunoglobulin superfamily, and thought to participate in the regulation of T-cell-mediated immune response. Studies show that while the transcript of this gene is ubiquitously expressed in normal tissues and solid tumors, the protein is preferentially expressed only in tumor tissues. Additionally, it was observed that the 3' UTR of this transcript contains a target site for miR29 microRNA, and there is an inverse correlation between the expression of this protein and miR29 levels, suggesting regulation of expression of this gene product by miR29. Alternatively spliced transcript variants encoding different isoforms have been found for this gene.

matters needing attention

Avoid repeated freezing and thawing!

Usage suggestions

This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

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