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PDCD1LG2 Rabbit pAb

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Catalog # AP50869

Product Information

Primary Accession	Q9BQ51
Reactivity	Human
Predicted	Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	30957
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human PDCD1LG2
Epitope Specificity	41-150/273
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SUBCELLULAR LOCATION	Isoform 3: Secreted (Probable). Isoform 2: Endomembrane system; Single-pass type I membrane protein. Isoform 1: Cell membrane; Single-pass type I membrane protein.
SIMILARITY	Belongs to the immunoglobulin superfamily. BTN/MOG family. Contains 1 Ig-like C2-type (immunoglobulin-like) domain. Contains 1 Ig-like V-type (immunoglobulin-like) domain.
SUBUNIT	Interacts with PDCD1.
Post-translational modifications	Phosphorylated by AKT1. Phosphorylation relieves inhibitory function on mTORC1.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	B7DC is a 33kDa member of the immunoglobulin receptor superfamily expressed on DC, liver and a small subset of macrophages as well as a few transformed cell lines. B7DC has been reported to be stimulatory on dendritic cells when cross linked and to inhibit T cell activation upon engaging the PD1 receptor. B7DC has also been reported to bind to an alternative receptor and to mediate T cell activation through non PD1 mediated interactions.

Additional Information

Gene ID	80380
Other Names	Programmed cell death 1 ligand 2, PD-1 ligand 2, PD-L2, PDCD1 ligand 2, Programmed death ligand 2, Butyrophilin B7-DC, B7-DC, CD273, PDCD1LG2, B7DC, CD273, PDCD1L2, PDL2
Target/Specificity	Highly expressed in heart, placenta, pancreas, lung and liver and weakly expressed in spleen, lymph nodes and thymus.

Dilution	ICC/IF=1:100-500,Flow-Cyt=1ug/Test
Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

Protein Information

Name	PDCD1LG2
Synonyms	B7DC, CD273, PDCD1L2, PDL2
Function	Involved in the costimulatory signal, essential for T-cell proliferation and IFNG production in a PDCD1-independent manner. Interaction with PDCD1 inhibits T-cell proliferation by blocking cell cycle progression and cytokine production (By similarity).
Cellular Location	[Isoform 3]: Secreted [Isoform 1]: Cell membrane; Single-pass type I membrane protein {ECO:0000250|UniProtKB:Q9WUL5, ECO:0000305|PubMed:15340161}
Tissue Location	Highly expressed in heart, placenta, pancreas, lung and liver and weakly expressed in spleen, lymph nodes and thymus

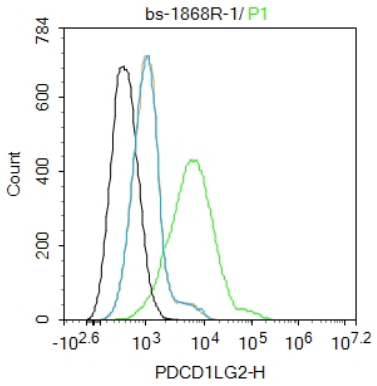
Background

B7DC is a 33kDa member of the immunoglobulin receptor superfamily expressed on DC, liver and a small subset of macrophages as well as a few transformed cell lines. B7DC has been reported to be stimulatory on dendritic cells when cross linked and to inhibit T cell activation upon engaging the PD1 receptor. B7DC has also been reported to bind to an alternative receptor and to mediate T cell activation through non PD1 mediated interactions.

References

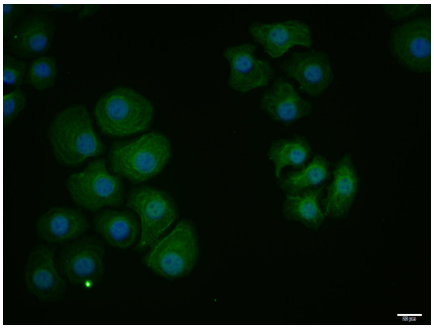
Tseng S.-Y.,et al.J. Exp. Med. 193:839-846(2001).
Latchman Y.,et al.Nat. Immunol. 2:261-268(2001).
He X.-H.,et al.Acta Biochim. Biophys. Sin. 36:284-289(2004).
Humphray S.J.,et al.Nature 429:369-374(2004).
Zhang Z.,et al.Protein Sci. 13:2819-2824(2004).

Images



Blank control:HepG2.
Primary Antibody (green line): Rabbit Anti-PDCD1LG2 antibody (AP50869)
Dilution: 1ug/Test;
Secondary Antibody (white blue line) : Goat anti-rabbit IgG-AF488
Dilution: 0.5ug/Test.
Isotype control(orange line) : Normal Rabbit IgG
Protocol
The cells were incubated in 5%BSA to block non-specific protein-protein interactions for 30 min at room

temperature .Cells stained with Primary Antibody for 30 min at room temperature. The secondary antibody used for 40 min at room temperature. Acquisition of 20,000 events was performed.



HepG2 cell; 4% Paraformaldehyde-fixed; Triton X-100 at room temperature for 20 min; Blocking buffer (normal goat serum, C-0005) at 37°C for 20 min; Antibody incubation with (PDCD1LG2) polyclonal Antibody, Unconjugated (AP50869) 1:100, 90 minutes at 37°C; followed by a conjugated Goat Anti-Rabbit IgG antibody at 37°C for 90 minutes, DAPI (blue, C02-04002) was used to stain the cell nuclei.