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PDL-2 Antibody

Catalog # ASC10510

Product Information

Application	WB, IF, E, IHC-P
Primary Accession	Q9BQ51
Other Accession	NP_079515, 190014605
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Calculated MW	30957
Concentration (mg/ml)	1 mg/mL
Conjugate	Unconjugated
Application Notes	PDL-2 antibody can be used for detection of PDL-2 by Western blot at 0.5 - 2 g/mL. Antibody can also be used for immunohistochemistry starting at 2.5 g/mL. For immunofluorescence start at 20 g/mL.

Additional Information

Gene ID	80380
Other Names	PDL-2 Antibody: B7DC, Btdc, PDL2, CD273, PD-L2, PDCD1L2, bA574F11.2, B7DC, Programmed cell death 1 ligand 2, Butyrophilin B7-DC, PD-1 ligand 2, programmed cell death 1 ligand 2
Target/Specificity	PDCD1LG2;
Reconstitution & Storage	PDL-2 antibody can be stored at 4℃ for three months and -20℃, 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	PDL-2 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

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

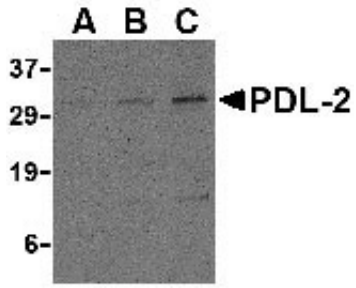
Background

PDL-2 Antibody: Cell-mediated immune responses are initiated by T lymphocytes that are themselves stimulated by co gnate peptides bound to MHC molecules on antigen-presenting cells (APC). T-cell activation is generally self-limited as activated T cells express receptors such as PD-1 (also known as PDCD-1) that mediate inhibitory signals from the APC. PD-1 can bind two different but related ligands, PDL-1 and PDL-2, both of which are thought act as a negative regulator of T cell activation. However, it has been suggested that PDL-2 can act to stimulate an immunogenic response through and alternative receptor from PD-1.

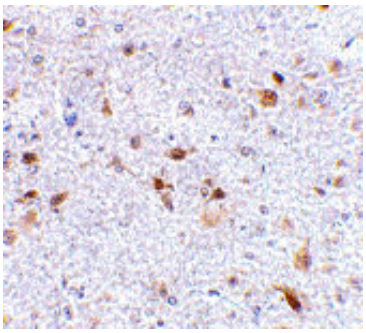
References

Holling TM, Schooten E, and van Den Elsing PJ. Function and regulation of MHC class II molecules in T-lymphocytes: of mice and men. Hum. Immunol. 2004; 65:282-90.
Ishida Y, Agata Y, Shibahara K, et al. Induced expression of PD-1, a novel member of the immunoglobulin gene superfamily, upon programmed cell death. EMBO J. 1992; 11:3887-95.
LaGier J and Pober JS. Immune accessory functions of human endothelial cells are modulated by overexpression of B7-H1 (PDL1). Hum. Immunol. 2006; 67:568-78.
Zhang Y, Chung Y, Bishop C, et al. Regulation of T cell activation and tolerance by PDL2. Proc. Natl. Acad. Sci. USA 2006; 103:11695-700.

Images

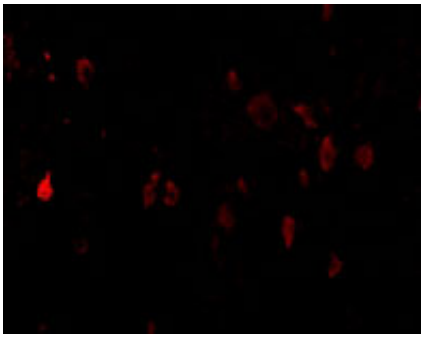


Western blot analysis of PDL-2 in Raji cell lysate with PDL-2 antibody at (A) 0.5, (B) 1 and (C) 2 µg/mL.



Immunohistochemistry of PDL-2 in mouse brain tissue with PDL-2 antibody at 2.5 µg/mL.

Immunofluorescence of PDL-2 in Mouse Brain cells with PDL-2 antibody at 20 µg/mL.



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