PerCP/Cyanine5.5 anti-mouse CD276 (B7-H3) Antibody

Catalog# / Size	135615 / 25 µg 135616 / 100 µg
Clone	MIH35
Regulatory Status	RUO
Other Names	B7RP2
Isotype	Rat IgG2a, κ
Description	B7-H3 is a type I transmembrane protein belonging to the B7 family of co-stimulatory proteins. B7-H3 is mostly expressed on professional APCs including B cells, macrophages, and dendritic cells at low levels. It is detected on various human and murine tumor cells, nasal and airway epithelial cells. Its expression on dendritic cells appears to be up-regulated by LPS. Initial studies have shown that B7-H3 provides a stimulatory signal to T cells. However, recent studies suggest a negative regulatory role for B7-H3 in T cell responses. Mouse B7-H3 protein inhibited T cell activation and effector cytokine production. Thus, the immunological function of B7-H3 remains unclear. B7-H3 is involved in the suppression of Th1-mediated immune responses and plays an important role in the development of pathogenic Th2 cells in a murine asthma model. Monoclonal antibody against B7-H3 enhances T cell proliferation in vitro and leads to exacerbated EAE *in vivo*. It has been reported that the Triggering Receptor Expressed on Myeloid cells (TREM)-like Transcript 2 (TLT-2, TREML2) is a receptor for B7-H3 in mice, although it remains controversial. Further studies are needed to identify the receptor of B7-H3.

Product Details

Verified Reactivity	Mouse
Antibody Type	Monoclonal
Host Species	Rat
Immunogen	Mouse B7-H3 transfected L cell and P815
Formulation	Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide.
Preparation	The antibody was purified by affinity chromatography and conjugated with PerCP/Cyanine5.5 under optimal conditions.
Concentration	0.2 mg/ml
Storage & Handling	The antibody solution should be stored undiluted between 2°C and 8°C, and protected from prolonged exposure to light. **Do not freeze.**
Application	FC - *Quality tested*
Recommended Usage	Each lot of this antibody is quality control tested by immunofluorescent staining with flow cytometric analysis. For flow cytometric staining, the suggested use of this reagent is =1.0 µg per million cells in 100 µl volume. It is recommended that the reagent be titrated for optimal performance for each application. * PerCP/Cyanine5.5 has a maximum absorption of 482 nm and a maximum emission of 690 nm.
Excitation Laser	Blue Laser (488 nm)
Application References **(PubMed link indicates BioLegend citation)**	1. Hashiguchi M, *et al.* 2008. *Proc Natl Acad Sci USA.* 105(30):10495. 2. del Rio ML, *et al.* 2011. *Transpl. Int.* 24:501. (FC) PubMed
RRID	AB_2800638 (BioLegend Cat. No. 135615) AB_2800639 (BioLegend Cat. No. 135616)

Antigen Details

Structure	A 49.7 kD member of the B7 family of the Ig superfamily proteins.
Distribution	Mostly expressed on professional APCs, including B cells, macrophages, and dendritic cells at low level.
Function	Provides a stimulatory signal to T cells, plays a negative regulatory role in T cell responses as well.
Ligand/Receptor	The receptor has not been completely identified, but it seems to be expressed on activated T cells.
Cell Type	Antigen-presenting cells, B cells, Dendritic cells
Biology Area	Cell Biology, Immunology, Signal Transduction, Costimulatory Molecules
Molecular Family	CD Molecules
Antigen References	1. Nagashima O, *et al.* 2008. *J. Immunol.* 181:4062 2. Prasad DVR, *et al.* 2004. *J. Immunol.* 173:2500 3. Sun M, *et al.* 2002. *J. Immunol.* 168:6294 4. Xu J, *et al.* 2006. *Cellular and Molecular Immunology.* 3(3):235 5. Ford JW, *et al.* 2009. *Curr Opin Immunol.* 21(1):38 6. Leitner J, *et al.* 2009. *Eur. J. Immunol.* 2009. 39(7):1754
Gene ID	102657

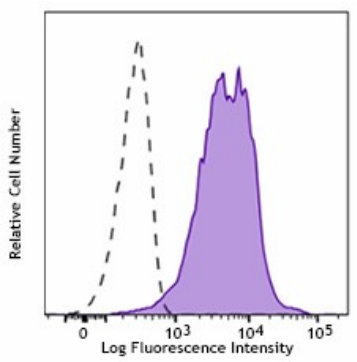
Related Protocols

Cell Surface Flow Cytometry Staining Protocol

Other Formats

Purified anti-mouse CD276 (B7-H3), PE anti-mouse CD276 (B7-H3), APC anti-mouse CD276 (B7-H3), Biotin anti-mouse CD276 (B7-H3), PE/Dazzle™ 594 anti-mouse CD276 (B7-H3), PE/Cyanine7 anti-mouse CD276 (B7-H3), PerCP/Cyanine5.5 anti-mouse CD276 (B7-H3), Ultra-LEAF™ Purified anti-mouse CD276 (B7-H3)

Product Data



Mouse B7-H3-transfected P815 cells were stained with CD276 (B7-H3) (clone MIH35) PerCP/Cyanine5.5 (filled histogram), or rat IgG2a, ? PerCP/Cyanine5.5 isotype control (open histogram).

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