

PE/Dazzle™ 594 anti-mouse CD276 (B7-H3) Antibody

Catalog# / Size	135611 / 25 µg 135612 / 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 <i>in vitro</i> and leads to exacerbated EAE <i>in vivo</i> . 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 PE/Dazzle™ 594 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. * PE/Dazzle™ 594 has a maximum excitation of 566 nm and a maximum emission of 610 nm.
Excitation Laser	Blue Laser (488 nm) Green Laser (532 nm)/Yellow-Green Laser (561 nm)
Application References	1. Hashiguchi M, <i>et al.</i> 2008. <i>Proc Natl Acad Sci USA</i> . 105(30):10495. 2. del Rio ML, <i>et al.</i> 2011. <i>Transpl. Int.</i> 24:501. (FC) PubMed
(PubMed link indicates BioLegend citation)	
RRID	AB_2750519 (BioLegend Cat. No. 135611) AB_2750520 (BioLegend Cat. No. 135612)

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	<ol style="list-style-type: none">1. Nagashima O, <i>et al.</i> 2008. <i>J. Immunol.</i> 181:40622. Prasad DVR, <i>et al.</i> 2004. <i>J. Immunol.</i> 173:25003. Sun M, <i>et al.</i> 2002. <i>J. Immunol.</i> 168:62944. Xu J, <i>et al.</i> 2006. <i>Cellular and Molecular Immunology.</i> 3(3):2355. Ford JW, <i>et al.</i> 2009. <i>Curr Opin Immunol.</i> 21(1):386. Leitner J, <i>et al.</i> 2009. <i>Eur. J. Immunol.</i> 2009. 39(7):1754
Gene ID	102657

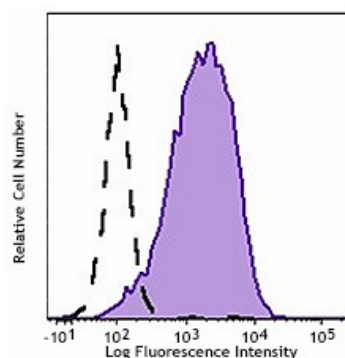
Related Protocols

[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 (clone MIH35) PE/Dazzle™ 594 (filled histogram) or rat IgG2a, κ PE/Dazzle™ 594 isotype control (open histogram).

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