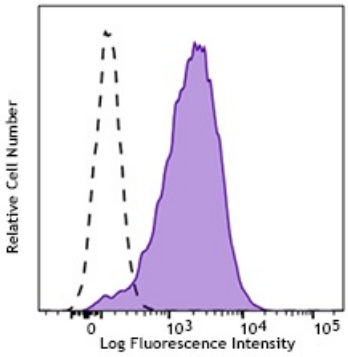
SONY

Product Data Sheet

PE/Cy7 anti-mouse CD276 (B7-H3)

Catalog # / Size:	1278065 / 25 µg 1278070 / 100 µg
Clone:	MIH35
Isotype:	Rat IgG2a, κ
Immunogen:	Mouse B7-H3 transfected L cell and P815
Reactivity:	Mouse



Mouse B7-H3-transfected P815 cells were stained with CD276 (B7-H3) (clone MIH35) PE/Cy7 (filled histogram), or rat IgG2a, κ PE/Cy7 isotype control (open histogram).

Applications:

Applications:	Flow Cytometry
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.
Application Notes:	Clone MIH35 was previously reported as reactive against human CD276 (B7-H3). Upon further in-house testing, it was determined that it does **not** react with human.
Application References:	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

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.

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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