Technical Data Sheet

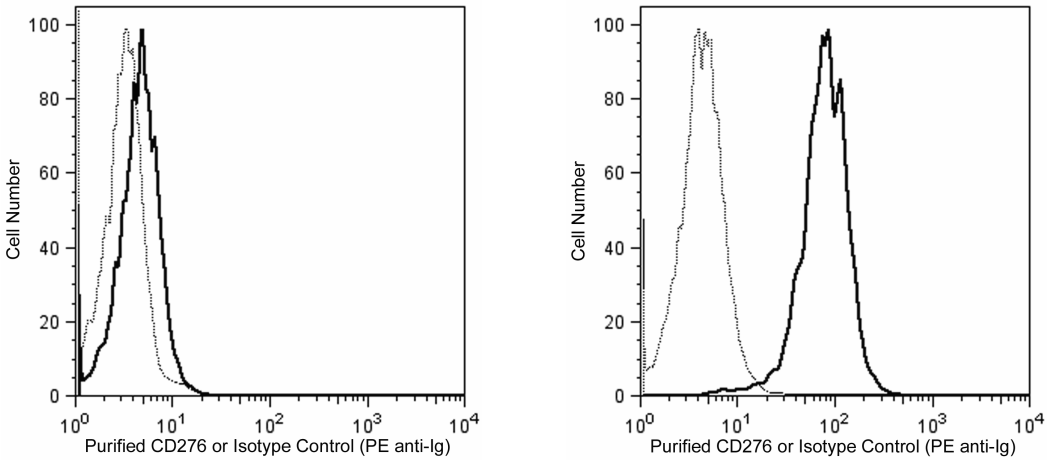
Purified Rat anti-Mouse CD276

Product Information

Material Number:	**562356**
Alternate Name:	Cd276; B7-H3; B7 homolog 3; B7h3; B7RP-2; Costimulatory molecule
Size:	0.1 mg
Concentration:	0.5 mg/ml
Clone:	MIH32
Immunogen:	Mouse B7-H3 Transfected Cell Line
Isotype:	Rat (SD) IgG2a, κ
Reactivity:	QC Testing: Mouse
Storage Buffer:	Aqueous buffered solution containing ≤0.09% sodium azide.

Description

The MIH32 monoclonal antibody specifically binds to CD276, also known as B7-H3 (B7 homolog 3). CD276 is a type I transmembrane glycoprotein and member of the B7-family of regulatory proteins. The expression of B7-H3 can be induced on T cells, natural killer (NK) cells and antigen presenting cells. B7-H3 is up-regulated during the differentiation of monocytes into dendritic cells or during the interaction between dendritic cells and regulatory T cells. In addition, B7-H3 is found to be expressed on fibroblasts, fibroblast-like synoviocytes and epithelial cells. CD276 (B7-H3) can function as a positive or a negative regulator of T responses.



Flow cytometric analysis of mouse CD276 (B7-H3) expressed on non-transfected and transfected cells. *Non-transfected (Left Panel) and CD276-transfected (Right Panel) J558L cells were stained with either Purified Rat IgG2a, κ Isotype Control (Cat. No. 555841; dashed line histogram) or Purified Rat Anti-Mouse CD276 antibody (Cat. No. 562356; solid line histogram). The cells were washed and then stained with PE Goat anti-Rat Ig (Cat. No. 550767). The fluorescence histograms were derived from gated events with the forward and side light-scatter characteristics of viable cells. Flow cytometry was performed using a BD™ LSRII Flow Cytometry System.*

Preparation and Storage

Store undiluted at 4°C.

The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity chromatography.

Application Notes

Application

Flow cytometry	Routinely Tested

Suggested Companion Products

Catalog Number	Name	Size	Clone
555841	Purified Rat IgG2a, κ Isotype Control	0.1 mg	R35-95
554656	Stain Buffer (FBS)	500 ml	(none)
550767	PE Goat Anti-Rat Ig	0.2 mg	Polyclonal

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Product Notices

1. Since applications vary, each investigator should titrate the reagent to obtain optimal results.
2. An isotype control should be used at the same concentration as the antibody of interest.
3. Caution: Sodium azide yields highly toxic hydrazoic acid under acidic conditions. Dilute azide compounds in running water before discarding to avoid accumulation of potentially explosive deposits in plumbing.
4. Please refer to www.bdbiosciences.com/pharmingen/protocols for technical protocols.

References

Chapoval AI, Ni J, Lau JS, et al. B7-H3: a costimulatory molecule for T cell activation and IFN-gamma production. *Nat Immunol.* 2001; 2(3):269-274. (Biology)
Hashiguchi M, Kobori H, Ritprajak P, Kamimura Y, Kozono H, Azuma M. Triggering receptor expressed on myeloid cell-like transcript 2 (TLT-2) is a counter-receptor for B7-H3 and enhances T cell responses. *Proc Natl Acad Sci U S A.* 2008; 105(30):10495-10500. (Clone-specific: Flow cytometry)
Sun M, Richards S, Prasad DV, Mai XM, Rudensky A, Dong C. Characterization of mouse and human B7-H3 genes. *J Immunol.* 2002; 168(12):6294-6297. (Biology)

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