

## Technical Data Sheet

## BV421 Rat Anti-Mouse CD276

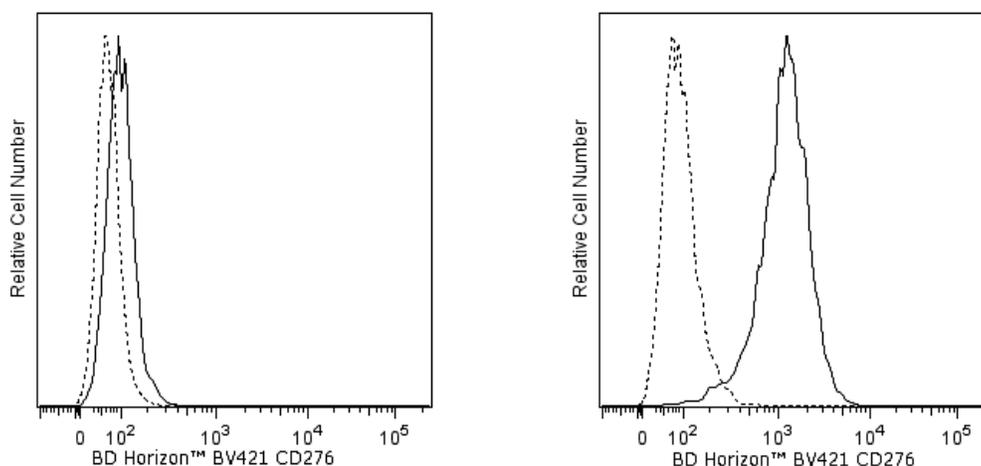
## Product Information

<b>Material Number:</b>	<b>562634</b>
<b>Alternate Name:</b>	Cd276; B7-H3; B7 homolog 3; B7h3; B7RP-2; Costimulatory molecule
<b>Size:</b>	50 µg
<b>Concentration:</b>	0.2 mg/ml
<b>Clone:</b>	MIH32
<b>Immunogen:</b>	Mouse B7-H3 Transfected Cell Line
<b>Isotype:</b>	Rat (SD) IgG2a, κ
<b>Reactivity:</b>	QC Testing: Mouse
<b>Storage Buffer:</b>	Aqueous buffered solution containing BSA and ≤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.

The antibody was conjugated to BD Horizon™ BV421 which is part of the BD Horizon™ Brilliant Violet™ family of dyes. With an Ex Max of 407-nm and Em Max at 421-nm, BD Horizon™ BV421 can be excited by the violet laser and detected in the standard Pacific Blue™ filter set (eg, 450/50-nm filter). BD Horizon™ BV421 conjugates are very bright, often exhibiting a 10 fold improvement in brightness compared to Pacific Blue™ conjugates.



*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 BD Horizon™ BV421 Rat Anti-Mouse CD276 antibody (Cat. No. 562634; solid line histogram), or with a BD Horizon™ BV421 Rat IgG2a, κ Isotype Control (Cat. No. 562602; dashed line histogram). 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™ LSR II Flow Cytometer System.*

## Preparation and Storage

Store undiluted at 4°C and protected from prolonged exposure to light. Do not freeze.

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

The antibody was conjugated with BD Horizon™ BV421 under optimum conditions, and unconjugated antibody and free BD Horizon™ BV421 were removed.

## Application Notes

## Application

Flow cytometry

Routinely Tested

## BD Biosciences

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## Suggested Companion Products

<u>Catalog Number</u>	<u>Name</u>	<u>Size</u>	<u>Clone</u>
562602	BV421 Rat IgG2a, $\kappa$ Isotype Control	50 $\mu$ g	R35-95
554656	Stain Buffer (FBS)	500 ml	(none)

## Product Notices

1. Since applications vary, each investigator should titrate the reagent to obtain optimal results.
2. Source of all serum proteins is from USDA inspected abattoirs located in the United States.
3. An isotype control should be used at the same concentration as the antibody of interest.
4. Please refer to [www.bdbiosciences.com/pharmingen/protocols](http://www.bdbiosciences.com/pharmingen/protocols) for technical protocols.
5. 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.
6. For fluorochrome spectra and suitable instrument settings, please refer to our Multicolor Flow Cytometry web page at [www.bdbiosciences.com/colors](http://www.bdbiosciences.com/colors).
7. Pacific Blue™ is a trademark of Molecular Probes, Inc., Eugene, OR.
8. Brilliant Violet™ 421 is a trademark of Sirigen.

## 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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