

## Technical Data Sheet

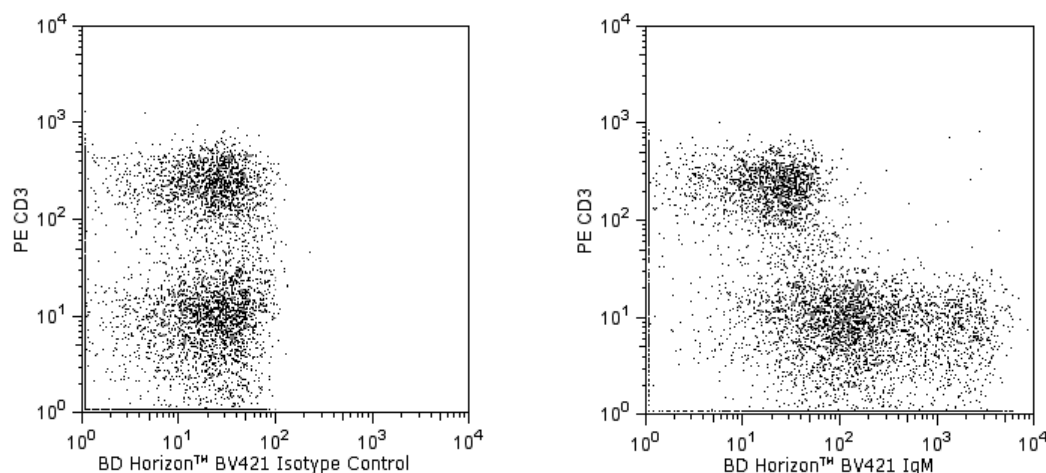
**BV421 Rat Anti-Mouse IgM****Product Information**

<b>Material Number:</b>	<b>562595</b>
<b>Alternate Name:</b>	Ighm; Igh-M; Immunoglobulin M; Igh6; muH; immunoglobulin heavy constant mu
<b>Size:</b>	50 µg
<b>Concentration:</b>	0.2 mg/ml
<b>Clone:</b>	R6-60.2
<b>Immunogen:</b>	Pooled Mouse Ig
<b>Isotype:</b>	Rat (LOU) IgG2a, κ
<b>Reactivity:</b>	QC Testing: Mouse
<b>Storage Buffer:</b>	Aqueous buffered solution containing BSA and ≤0.09% sodium azide.

**Description**

The R6-60.2 antibody monoclonal antibody specifically binds to mouse Immunoglobulin M (IgM) of Igh-C[a] and Igh-C[b] haplotypes. It does not react with other Ig isotypes. The R6-60.2 antibody has not been shown to stimulate B-cell proliferation.

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 IgM expression on mouse splenocytes.** Splenocytes from BALB/c mice were stained with PE Hamster Anti-Mouse CD3 (Cat. No. 553064/553063/561824) and either with a BD Horizon™ BV421 Rat IgG2a, κ Isotype Control (Cat. No. 562602, Left Panel) or with the BD Horizon™ BV421 Rat Anti-Mouse IgM antibody (Cat. No. 562595, Right Panel). Two-color flow cytometric dot plots showing the correlated expression of IgM (or Ig isotype control staining) and CD3 were derived from gated events with the light scattering characteristics of viable splenocytes. Flow cytometry was performed using a BD™ LSR II Flow Cytometry 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
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## Suggested Companion Products

Catalog Number	Name	Size	Clone
562602	BV421 Rat IgG2a, $\kappa$ Isotype Control	50 $\mu$ g	R35-95
554656	Stain Buffer (FBS)	500 ml	(none)
553064	PE Hamster Anti-Mouse CD3e	0.2 mg	145-2C11
553063	PE Hamster Anti-Mouse CD3e	0.1 mg	145-2C11
561824	PE Hamster Anti-Mouse CD3e	25 $\mu$ g	145-2C11

## 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. Please refer to [www.bdbiosciences.com/pharming/protocols](http://www.bdbiosciences.com/pharming/protocols) for technical protocols.
4. Source of all serum proteins is from USDA inspected abattoirs located in the United States.
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

BD Biosciences Pharmingen. Unpublished results. . (Immunogen)

Gavin AL, Duong B, Skog P, Ait-Azzouzene D, Greaves DR, Scott ML, Nemazee D.  $\delta$ BAFF, a splice isoform of BAFF, opposes full-length BAFF activity in vivo in transgenic mouse models. *J Immunol.* 2005; 75(1):319-328. (Clone-specific: ELISA)

Touma M, Keskin DB, Shiroki F, Saito I, Koyasu S, Reinherz EL, Clayton LK. Impaired B cell development and function in the absence of I $\kappa$ BNS. *J Immunol.* 2011; 187(8):3942-3952. (Clone-specific: Flow cytometry)

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