

**Brilliant Violet 421™ anti-mouse CD19**

**Catalog # / Size:** 1177685 / 125 µl  
 1177690 / 500 µl  
 1177745 / 50 µg

**Clone:** 6D5

**Isotype:** Rat IgG2a, κ

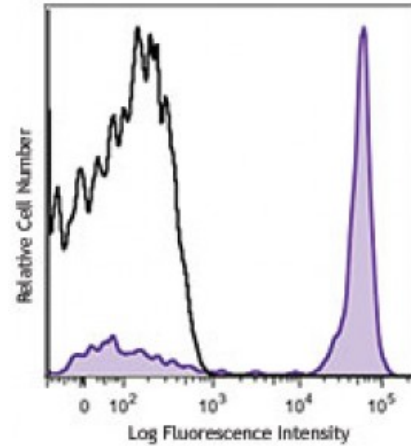
**Immunogen:** Mouse CD19-expressing K562 human erythroleukemia cells

**Reactivity:** Mouse

**Preparation:** The antibody was purified by affinity chromatography and conjugated with Brilliant Violet 421™ under optimal conditions. The solution is free of unconjugated Brilliant Violet 421™ and unconjugated antibody.

**Formulation:** Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide and BSA (origin USA).

**Concentration:** microg sizes: 0.2 mg/ml  
 microL sizes: lot-specific

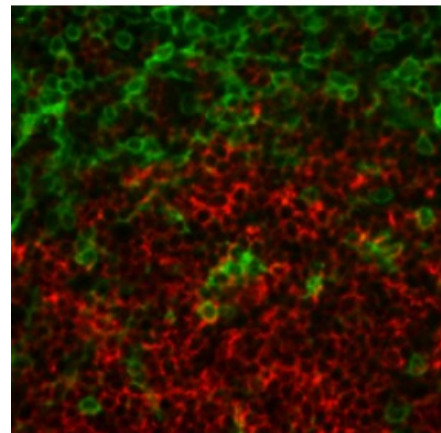


C57BL/6 mouse splenocytes were stained with CD19 (clone 6D5) Brilliant Violet 421™ (filled histogram) or rat IgG2a, κ Brilliant Violet 421™ isotype control (open histogram).

**Applications:**

**Applications:** Flow Cytometry

**Recommended Usage:** Each lot of this antibody is quality control tested by immunofluorescent staining with flow cytometric analysis. For immunofluorescent staining using the microg size, the suggested use of this reagent is ≤0.25 microg per million cells in 100 microL volume. For immunofluorescent staining using microL sizes, the suggested use of this reagent is ≤5 microL per million cells or 5 microL per 100 microL of whole blood. It is recommended that the reagent be titrated for optimal performance for each application.



BL/6 mouse lymph nodes, fixed O/N in PLP, blocked with 10% rat serum, stained with CD19-BV421™ (red) and CD4-Alexa Fluor® 488 (green) in 1% BSA and 0.1% Tween-20 in PBS. Images were acquired with an automated widefield microscope (Nikon Eclipse)

Brilliant Violet 421™ excites at 405 nm and emits at 421 nm. The standard bandpass filter 450/50 nm is recommended for detection. Brilliant Violet 421™ is a trademark of Sirigen Group Ltd.

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resold or incorporated in any manner into another product for resale. Any use for therapeutics or diagnostics is strictly prohibited. This product is covered by U.S. Patent(s), pending patent applications and foreign equivalents.

**Application Notes:** Additional reported applications (for the relevant formats) include: immunofluorescence<sup>7</sup>.

**Application References:**

1. Shoham T, *et al.* 2003. *J. Immunol.* 171:4062. (FC)
2. Goodyear CS, *et al.* 2004. *J. Immunol.* 172:2870. (FC)
3. Kamimura D, *et al.* 2006. *J. Immunol.* 177:306. (FC)
4. Andoniou CE, *et al.* 2005. *Nat. Immunol.* 6:1011. (FC)
5. Lawson BR, *et al.* 2007. *J. Immunol.* 178:5366. (FC)
6. Phan TG, *et al.* 2007. *Nat. Immunol.* 8:992. (FC)
7. Hayashida K, *et al.* 2008. *J. Biol. Chem.* 283:19895. (IF) [PubMed](#)
8. Charles N, *et al.* 2010. *Nat. Med.* 16:701. (FC) [PubMed](#)
9. Bankoti J, *et al.* 2010. *Toxicol. Sci.* 115:422. (FC) [PubMed](#)
10. Stadnisky MD, *et al.* 2011. *Blood.* 117:5133. (FC) [PubMed](#)
11. Perlot T, *et al.* 2012. *J. Immunol.* 188:1201. (FC) [PubMed](#)
12. Rosalia RA, *et al.* 2013. *Immunobiology.* 218:851. [PubMed](#)
13. Weber GF, *et al.* 2014. *J Exp Med.* 211:1243. [PubMed](#)
14. Kennedy JM, *et al.* 2014. *J Exp Med.* 211:2519. [PubMed](#)

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**Description:** CD19 is a 95 kD glycoprotein also known as B4. It is a member of the Ig superfamily, expressed on all pro-B to mature B cells (during development) and follicular dendritic cells. Plasma cells do not express CD19. CD19, in association with CD21 and CD81, forms a molecular complex integral to B cell activation.

**Antigen References:**

1. Fearon DT. 1993. *Curr. Opin. Immunol.* 5:341.
2. Krop I, *et al.* 1996. *Eur. J. Immunol.* 26:238.
3. Krop I, *et al.* 1996. *J. Immunol.* 157:48.
4. Tedder TF, *et al.* 1994. *Immunol.*