

Alexa Fluor® 594 anti-mouse CD19 Antibody

Catalog# / Size	115552 / 100 µg
Clone	6D5
Regulatory Status	RUO
Other Names	B4
Isotype	Rat IgG2a, κ
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.

Product Details

Verified Reactivity	Mouse
Antibody Type	Monoclonal
Host Species	Rat
Immunogen	Mouse CD19-expressing K562 human erythroleukemia cells
Formulation	Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide.
Preparation	The antibody was purified by affinity chromatography and conjugated with Alexa Fluor® 594 under optimal conditions.
Concentration	0.5 mg/ml
Storage & Handling	The antibody solution should be stored undiluted between 2°C and 8°C, and protected from prolonged exposure to light. Do not freeze.
Application	IHC-F - Quality tested FC - Verified
Recommended Usage	<p>Each lot of this antibody is quality control tested by immunohistochemical staining on frozen tissue sections. For immunohistochemistry, a concentration range of 1.0 - 5.0 µg/mL is suggested. For flow cytometric staining, the suggested use of this reagent is ≤ 0.25 µg per million cells in 100 µL volume. It is recommended that the reagent be titrated for optimal performance for each application.</p> <p>* Alexa Fluor® 594 has an excitation maximum of 590 nm, and a maximum emission of 617 nm.</p> <p>Alexa Fluor® and Pacific Blue™ are trademarks of Life Technologies Corporation.</p> <p>View full statement regarding label licenses</p>
Application Notes	Additional reported applications (for the relevant formats) include: immunofluorescence ⁷ .
Application References	<ol style="list-style-type: none">1. Shoham T, <i>et al.</i> 2003. <i>J. Immunol.</i> 171:4062. (FC)2. Goodyear CS, <i>et al.</i> 2004. <i>J. Immunol.</i> 172:2870. (FC)3. Kamimura D, <i>et al.</i> 2006. <i>J. Immunol.</i> 177:306. (FC)4. Andoniou CE, <i>et al.</i> 2005. <i>Nat. Immunol.</i> 6:1011. (FC)5. Lawson BR, <i>et al.</i> 2007. <i>J. Immunol.</i> 178:5366. (FC)6. Phan TG, <i>et al.</i> 2007. <i>Nat. Immunol.</i> 8:992. (FC)7. Hayashida K, <i>et al.</i> 2008. <i>J. Biol. Chem.</i> 283:19895. (IF) PubMed8. Charles N, <i>et al.</i> 2010. <i>Nat. Med.</i> 16:701. (FC) PubMed9. Bankoti J, <i>et al.</i> 2010. <i>Toxicol. Sci.</i> 115:422. (FC) PubMed10. Stadnisky MD, <i>et al.</i> 2011. <i>Blood.</i> 117:5133. (FC) PubMed11. Perlot T, <i>et al.</i> 2012. <i>J. Immunol.</i> 188:1201. (FC) PubMed12. Olive V, <i>et al.</i> 2013. <i>Elife.</i> 2:822. PubMed13. Miyai T, <i>et al.</i> 2014. <i>PNAS.</i> 111:11780. PubMed
(PubMed link indicates BioLegend citation)	

Product Citations

1. Mooney J, *et al.* 2015. *Sci Rep.* 5: 14603. [PubMed](#)
2. Rey-Suarez I, *et al.* 2020. *Nat Commun.* 0.763194444. [PubMed](#)
3. Ogawa T, *et al.* 2022. *PLoS One.* 17:e0262397. [PubMed](#)
4. Tuong ZK, *et al.* 2021. *Cell Rep.* 37:110132. [PubMed](#)

RRID

AB_2563459 (BioLegend Cat. No. 115552)

Antigen Details

Structure	Ig superfamily, associates with CD21 and CD81, 95 kD
Distribution	Pro-B cells to mature B cells (during development), follicular dendritic cells
Function	Modulates B cell activation and differentiation
Ligand/Receptor	CD21, CD81, Leu-13
Cell Type	B cells, Dendritic cells
Biology Area	Costimulatory Molecules, Immunology
Molecular Family	CD Molecules
Antigen References	<ol style="list-style-type: none">1. Fearon DT. 1993. <i>Curr. Opin. Immunol.</i> 5:341.2. Krop I, <i>et al.</i> 1996. <i>Eur. J. Immunol.</i> 26:238.3. Krop I, <i>et al.</i> 1996. <i>J. Immunol.</i> 157:48.4. Tedder TF, <i>et al.</i> 1994. <i>Immunol. Today</i> 15:437.
Gene ID	12478

Related Protocols

[Immunohistochemistry Protocol for Frozen Sections](#)

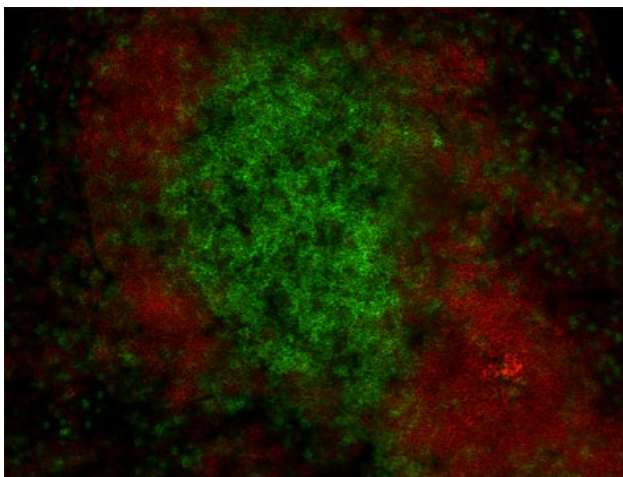
[Cell Surface Flow Cytometry Staining Protocol](#)

[Immunocytochemistry Staining Protocol](#)

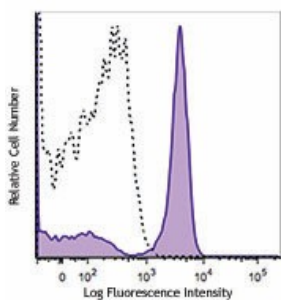
Other Formats

APC anti-mouse CD19, Biotin anti-mouse CD19, FITC anti-mouse CD19, PE anti-mouse CD19, PE/Cyanine5 anti-mouse CD19, Purified anti-mouse CD19, PE/Cyanine7 anti-mouse CD19, Alexa Fluor® 488 anti-mouse CD19, Alexa Fluor® 647 anti-mouse CD19, Pacific Blue™ anti-mouse CD19, Alexa Fluor® 700 anti-mouse CD19, APC/Cyanine7 anti-mouse CD19, PerCP anti-mouse CD19, PerCP/Cyanine5.5 anti-mouse CD19, Alexa Fluor® 594 anti-mouse CD19, Brilliant Violet 421™ anti-mouse CD19, Brilliant Violet 570™ anti-mouse CD19, Brilliant Violet 605™ anti-mouse CD19, Brilliant Violet 650™ anti-mouse CD19, Brilliant Violet 785™ anti-mouse CD19, Brilliant Violet 510™ anti-mouse CD19, Purified anti-mouse CD19 (Maxpar® Ready), PE/Dazzle™ 594 anti-mouse CD19, Brilliant Violet 711™ anti-mouse CD19, APC/Fire™ 750 anti-mouse CD19, TotalSeq™-A0093 anti-mouse CD19, Brilliant Violet 750™ anti-mouse CD19, TotalSeq™-B0093 anti-mouse CD19, Spark Blue™ 550 anti-mouse CD19, Spark NIR™ 685 anti-mouse CD19, TotalSeq™-C0093 anti-mouse CD19, Ultra-LEAF™ Purified anti-mouse CD19, PE/Fire™ 640 anti-mouse CD19 Antibody, Spark YG™ 581 anti-mouse CD19, APC/Fire™ 810 anti-mouse CD19, Spark YG™ 570 anti-mouse CD19, Spark Blue™ 574 anti-mouse CD19 Antibody

Product Data



C57BL/6 mouse frozen lymph node section was fixed with 4% paraformaldehyde (PFA) for 10 minutes at room temperature and blocked with 5% FBS plus 5% rat serum/5% mouse serum for 1 hour at room temperature. Then the section was stained with 2.5 $\mu\text{g}/\text{ml}$ of CD19 (clone 6D5) Alexa Fluor® 594 (red) and 2.5 $\mu\text{g}/\text{ml}$ of CD3 (clone 145-2C11) Alexa Fluor® 647 (green) overnight at 4°C. The image was captured by 10X objective.



C57BL/6 mouse splenocytes were stained with CD19 (clone 6D5) Alexa Fluor® 594 (filled histogram) or rat IgG2a, κ Alexa Fluor® 594 isotype control (open histogram). The data was acquired by BD LSRFortessa™ cell analyzer equipped with Yellow-Green Laser (561 nm).

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