

Brilliant Violet 421™ anti-mouse CD21/CD35 (CR2/CR1) Antibody

Catalog# / Size	123421 / 125 µL 123422 / 50 µg
Clone	7E9
Regulatory Status	RUO
Other Names	CR2/CR1
Isotype	Rat IgG2a, κ
Description	CD21, also known as CR2 (complement receptor 2) and C3d receptor, binds C3d and iC3b. It is also a receptor of Epstein-Barr virus. CD35, also known as CR1, binds C3b, iC3b, C4b, and iC4b. CD21/CD35 is primarily expressed on B lymphocytes, mast cells, follicular dendritic cells, macrophages, and activated granulocytes. CD21/CD35 forms part of the B-cell antigen receptor complex with CD19 and CD81 and is involved in signal transduction.

Product Details

Verified Reactivity	Mouse
Antibody Type	Monoclonal
Host Species	Rat
Immunogen	CD35/CFA
Formulation	µL & µg sizes: Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide and BSA (origin USA).
Preparation	The antibody was purified by affinity chromatography and conjugated with Brilliant Violet 421™ under optimal conditions.
Concentration	µg size: 0.2 mg/mL µL size: lot-specific (to obtain lot-specific concentration, please enter the lot number in our Concentration and Expiration Lookup or Certificate of Analysis online tools.)
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	FC - Quality tested
Recommended Usage	Each lot of this antibody is quality control tested by immunofluorescent staining with flow cytometric analysis . For flow cytometric staining using the µL size, the suggested use of this reagent is 5 µL per million cells in 100 µL staining volume or 5 µL per 100 µL of whole blood. For flow cytometric staining using the µg size, 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. 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. Learn more about Brilliant Violet™. This product is subject to proprietary rights of Sirigen Inc. and is made and sold under license from Sirigen Inc. The purchase of this product conveys to the buyer a non-transferable right to use the purchased product for research purposes only. This product may not be 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.
Excitation Laser	Violet Laser (405 nm)
Application References	1. Boackle S, <i>et al.</i> 2001 <i>Immunity</i> 15:775. 2. de Andres B, <i>et al.</i> 2012. <i>J. Immunol.</i> 189:2300. PubMed 3. Chiu YK, <i>et al.</i> 2014. <i>J Immunol.</i> 193:2207. PubMed
(PubMed link indicates BioLegend citation)	

4. Koenig PA, *et al.* 2014. *J Biol Chem.* 289:34490. [PubMed](#)
5. Radtke AJ, *et al.* 2020. *Proc Natl Acad Sci U S A.* 117:33455-65. (SB) [PubMed](#)
6. Radtke AJ, *et al.* 2022. *Nat Protoc.* 17:378-401. (SB) [PubMed](#)

Product Citations

1. Xu AQ, *et al.* 2020. *Elife.* 9:00. [PubMed](#)
2. Mathew NR, *et al.* 2021. *Cell Reports.* 35(12):109286. [PubMed](#)
3. Lu Y, *et al.* 2020. *Cell.* 180(6):1081-1097. [PubMed](#)
4. Gioni M, *et al.* 2021. *Blood Adv.* 5:2817. [PubMed](#)
5. Castiblanco D, *et al.* 2017. *Front Immunol.* . 10.3389/fimmu.2017.01833. [PubMed](#)
6. Wittner J, *et al.* 2022. *Mucosal Immunol.* 15:668. [PubMed](#)
7. Lederer K, *et al.* 2020. *Immunity.* 53(6):1281-1295.e5. [PubMed](#)

RRID

AB_10965544 (BioLegend Cat. No. 123421)
 AB_2650891 (BioLegend Cat. No. 123422)

Antigen Details

Structure	145 kD/190 kD type I transmembrane glycoprotein
Distribution	B cells, follicular dendritic cells
Function	Signal transduction
Ligand/Receptor	Associated with CD19/CD81. CD21 binds C3d, iC3b, and EBV; CD35 binds C3b, iC3b, C4b, and iC4b.
Cell Type	B cells, Dendritic cells
Biology Area	Cell Biology, Costimulatory Molecules, Immunology, Neuroinflammation, Neuroscience
Molecular Family	Adhesion Molecules, CD Molecules
Antigen References	<ol style="list-style-type: none"> 1. Kozono Y, <i>et al.</i> 1998. <i>J. Immunol.</i> 160:1562. 2. Shimizu I, <i>et al.</i> 2007. <i>Blood</i> 109:1773. 3. Roozendaal R and MC. Carroll. 2007. <i>Immunol. Rev.</i> 219:157.
Gene ID	12902 12946

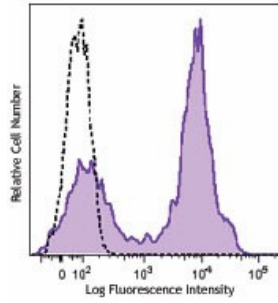
Related Protocols

[Cell Surface Flow Cytometry Staining Protocol](#)

Other Formats

PE/Cyanine7 anti-mouse CD21/CD35 (CR2/CR1), APC/Cyanine7 anti-mouse CD21/CD35 (CR2/CR1), Biotin anti-mouse CD21/CD35 (CR2/CR1), FITC anti-mouse CD21/CD35 (CR2/CR1), PE anti-mouse CD21/CD35 (CR2/CR1), APC anti-mouse CD21/CD35 (CR2/CR1), Pacific Blue™ anti-mouse CD21/CD35 (CR2/CR1), PerCP/Cyanine5.5 anti-mouse CD21/CD35 (CR2/CR1), Brilliant Violet 421™ anti-mouse CD21/CD35 (CR2/CR1), Alexa Fluor® 647 anti-mouse CD21/CD35 (CR2/CR1), Alexa Fluor® 594 anti-mouse CD21/CD35 (CR2/CR1), TotalSeq™-A0107 anti-mouse CD21/CD35 (CR2/CR1), Alexa Fluor® 700 anti-mouse CD21/CD35 (CR2/CR1), APC/Fire™ 750 anti-mouse CD21/CD35 (CR2/CR1), TotalSeq™-C0107 anti-mouse CD21/CD35 (CR2/CR1), Brilliant Violet 711™ anti-mouse CD21/CD35 (CR2/CR1), PE/Dazzle™ 594 anti-mouse CD21/CD35 (CR2/CR1), Brilliant Violet 510™ anti-mouse CD21/CD35 (CR2/CR1), Ultra-LEAF™ Purified anti-mouse CD21/CD35 (CR2/CR1)

Product Data



C57BL/6 splenocytes stained with CD21/CD35 (clone 7E9) Brilliant Violet 421™ (filled histogram) or rat IgG2a, κ Brilliant Violet 421™ isotype control (open histogram).

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