

## Brilliant Violet 711™ anti-mouse CD64 (FcγRI) Antibody

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| <b>Catalog# / Size</b>   | 161013 / 50 µg                                                                                                                                                                                                                                                                                                                                                                                                                       |
| <b>Clone</b>             | S18017D                                                                                                                                                                                                                                                                                                                                                                                                                              |
| <b>Regulatory Status</b> | RUO                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <b>Other Names</b>       | FcRI                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| <b>Isotype</b>           | Rat IgG2a, κ                                                                                                                                                                                                                                                                                                                                                                                                                         |
| <b>Description</b>       | CD64 is a 72 kD single chain type I glycoprotein also known as FcγRI and FcRI. CD64 is a member of the immunoglobulin superfamily and is expressed on monocytes/macrophages, dendritic cells, and mast cells. The expression can be upregulated by IFN-γ stimulation. CD64 binds IgG immune complex. It plays a role in antigen capture, phagocytosis of IgG/antigen complexes, and antibody-dependent cellular cytotoxicity (ADCC). |

### Product Details

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| <b>Verified Reactivity</b>    | Mouse, Human                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| <b>Antibody Type</b>          | Monoclonal                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| <b>Host Species</b>           | Rat                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| <b>Immunogen</b>              | Recombinant mouse FcγRI/CD64 (Cat. No. 773806)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| <b>Formulation</b>            | Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide and BSA (origin USA)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| <b>Preparation</b>            | The antibody was purified by affinity chromatography and conjugated with Brilliant Violet 711™ under optimal conditions.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| <b>Concentration</b>          | 0.2 mg/mL                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <b>Storage &amp; Handling</b> | The antibody solution should be stored undiluted between 2°C and 8°C, and protected from prolonged exposure to light. <b>Do not freeze.</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| <b>Application</b>            | <a href="#">FC - Quality tested</a>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| <b>Recommended Usage</b>      | <p>Each lot of this antibody is quality control tested by <a href="#">immunofluorescent staining with flow cytometric analysis</a>. For flow cytometric staining, the suggested use of this reagent is ≤ 0.06 µg per million cells in 100 µL volume. It is recommended that the reagent be titrated for optimal performance for each application.</p> <p>Brilliant Violet 711™ excites at 405 nm and emits at 711 nm. The bandpass filter 710/50 nm is recommended for detection, although filter optimization may be required depending on other fluorophores used. Be sure to verify that your cytometer configuration and software setup are appropriate for detecting this channel. Refer to your instrument manual or manufacturer for support. Brilliant Violet 711™ is a trademark of Sirigen Group Ltd.</p> <p><a href="#">Learn more about Brilliant Violet™.</a></p> <p>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.</p> |
| <b>Excitation Laser</b>       | Violet Laser (405 nm)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| <b>RRID</b>                   | AB_3717101 (BioLegend Cat. No. 161013)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |

## Antigen Details

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|--------------------|----------------------------------------------------------------------------------------------------------------------------------------------|
| Structure          | Ig superfamily, type I glycoprotein, 72 kD                                                                                                   |
| Distribution       | Monocytes, macrophages, mast cells, dendritic cells                                                                                          |
| Function           | Phagocytosis, ADCC                                                                                                                           |
| Ligand/Receptor    | IgG                                                                                                                                          |
| Antigen References | 1. Schyns J, <i>et al.</i> 2019. <i>Nat. Commun.</i> 3;10(1):3964<br>2. Langlet C, <i>et al.</i> 2012. <i>J. Immunol.</i> 188 (4) 1751-1760. |
| Gene ID            | <a href="#">14129</a>                                                                                                                        |

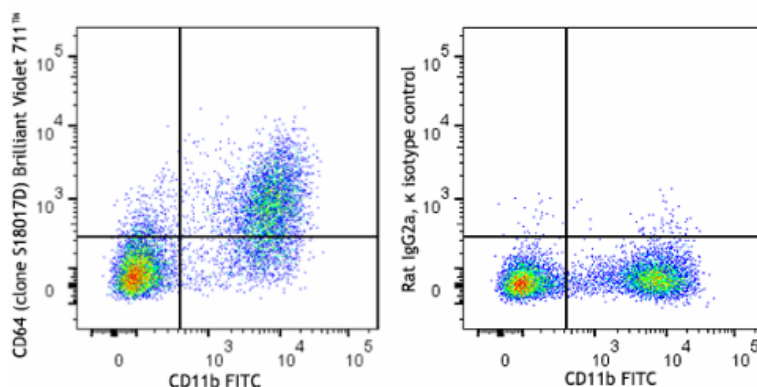
## Related Protocols

- [Cell Surface Flow Cytometry Staining Protocol](#)

## Other Formats

Purified anti-mouse CD64 (FcγRI) Antibody, APC anti-mouse CD64 (FcγRI), FITC anti-mouse CD64 (FcγRI), PE anti-mouse CD64 (FcγRI), PE/Fire™ 744 anti-mouse CD64 (FcγRI), Spark PLUS B550™ anti-mouse CD64 (FcγRI), Spark Blue™ 574 anti-mouse CD64 (FcγRI) (Flexi-Fluor™), Brilliant Violet 711™ anti-mouse CD64 (FcγRI) Antibody, Brilliant Violet 421™ anti-mouse CD64 (FcγRI) Antibody

## Product Data



C57BL/6 mouse bone marrow cells were stained with anti-mouse/human CD11b (clone M1/70) FITC and anti-mouse CD64 (FcγRI) (clone S18017D) Brilliant Violet 711™ (left) or rat IgG2a, κ Brilliant Violet 711™ isotype control (right). Data shown were gated on total cells.

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