

Brilliant Violet 421™ anti-mouse Blimp-1 Antibody

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| Catalog# / Size | 150009 / 50 µg |
| Clone | 5E7 |
| Regulatory Status | RUO |
| Other Names | PR domain zinc finger protein 1, B lymphocyte-induced maturation protein-1, PRDM1, BLIMP1, PRDI-BF1, ZNFPR1A1, PRDM-1, BLIMP1 |
| Isotype | Rat IgG2a, κ |
| Description | Blimp-1, also known as PRDM1, is a 98 kD protein containing 5 Kruppel-type zinc finger domains. Blimp-1 represses the transcription factors BCL6 and c-Myc. It is the master regulator of terminal B cell differentiation and is also involved in the differentiation and homeostasis of T cells and natural killer (NK) cells. |

Product Details

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| Verified Reactivity | Mouse |
| Antibody Type | Monoclonal |
| Host Species | Rat |
| Immunogen | Amino acids 255-395 from mouse Blimp-1 fused with GST. |
| Formulation | 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 | 0.2 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 | ICFC - Quality tested |
| Recommended Usage | <p>Each lot of this antibody is quality control tested by intracellular immunofluorescent staining with flow cytometric analysis. 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>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.</p> <p>Learn more about Brilliant Violet™.</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> |
| Excitation Laser | Violet Laser (405 nm) |
| Application Notes | NOTE: For flow cytometric staining with this clone, True-Nuclear™ Transcription Factor Buffer Set (Cat. No. 424401) offers improved staining and is highly recommended. |
| RRID | AB_3683165 (BioLegend Cat. No. 150009) |

Antigen Details

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| Structure | Five Kruppel-type zinc finger domains, 98 kD. |
| Distribution | Plasma cells, CD4 ⁺ and CD8 ⁺ effector/memory T cells, and natural killer cells. |
| Function | Terminal differentiation of B cells, effector/memory T cells, role in natural killer cells (NK) and T cell homeostasis, and repressor of BCL6 and c-Myc. |
| Cell Type | B cells, NK cells, Plasma cells, T cells |
| Biology Area | Cell Biology, Immunology, Transcription Factors |
| Antigen References | <ol style="list-style-type: none">1. Nakaki F, <i>et al.</i> 2013. <i>Nature</i> 501:222.2. Crotty S, <i>et al.</i> 2010. <i>Nat. Immunol.</i> 11:114.3. Zhao WL, <i>et al.</i> 2008. <i>Blood</i> 111:3867.4. Climmino L, <i>et al.</i> 2008. <i>J. Immunol.</i> 181:2338.5. Martins, G and Clarne, K. 2008. <i>Annu. Rev. Immunol.</i> 26:133. |
| Gene ID | 12142 |

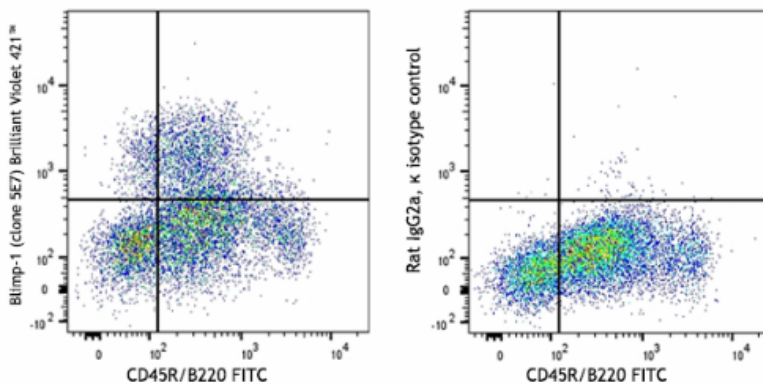
Related Protocols

- [True-Nuclear™ Transcription Factor Staining Protocol for 96-Well U Bottom Plate](#)
- [True-Nuclear™ Transcription Factor Staining Protocol for 5mL Tubes](#)
- [Intracellular Flow Cytometry Staining Protocol](#)

Other Formats

Alexa Fluor® 647 anti-mouse Blimp-1, PE anti-mouse Blimp-1, APC anti-mouse Blimp-1, Brilliant Violet 421™ anti-mouse Blimp-1

Product Data



C57BL/6 splenocytes were cultured for 3 days in the presence of LPS and surface stained with anti-mouse CD45R/B220 (clone RA3-6B2) FITC. Cells were then fixed and permeabilized using True-Nuclear™ Transcription Factor Buffer (Cat. No. 424401), then intracellularly stained with anti-mouse Blimp-1 (clone 5E7) Brilliant Violet 421™ (left) or rat IgG2a, κ Brilliant Violet 421™ isotype control (right).

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