Brilliant Violet 421™ anti-mouse Blimp-1 Antibody

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

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	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. 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 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

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	1. Nakaki F, *et al.* 2013. *Nature* 501:222. 2. Crotty S, *et al.* 2010. *Nat. Immunol.* 11:114. 3. Zhao WL, *et al.* 2008. *Blood* 111:3867. 4. Climmino L, *et al.* 2008. *J. Immunol.* 181:2338. 5. Martins, G and Clarne, K. 2008. *Annu. Rev. Immunol.* 26:133.
Gene ID	12142

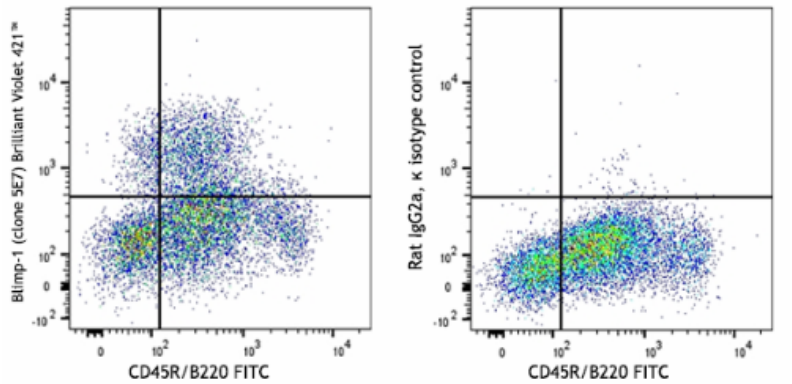
Related Protocols

- 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).

8999 BioLegend Way, San Diego, CA 92121 www.biolegend.com
Toll-Free Phone: 1-877-Bio-Legend (246-5343) Phone: (858) 768-5800 Fax: (877) 455-9587