Alexa Fluor® 647 anti-mouse Blimp-1 Antibody

Catalog# / Size	150003 / 25 µg 150004 / 100 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.
Preparation	The antibody was purified by affinity chromatography and conjugated with Alexa Fluor® 647 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	ICFC - Quality tested WB - Reported in the literature, not verified in house
Recommended Usage	Each lot of this antibody is quality control tested by intracellular flow cytometry using our True-Nuclear™ Transcription Factor Staining Protocol. For flow cytometric staining, the suggested use of this reagent is ≤0.125 µg per million cells in 100 µl volume. It is recommended that the reagent be titrated for optimal performance for each application. * Alexa Fluor® 647 has a maximum emission of 668 nm when it is excited at 633 nm / 635 nm. Alexa Fluor® and Pacific Blue™ are trademarks of Life Technologies Corporation. View full statement regarding label licenses
Excitation Laser	Red Laser (633 nm)

Product Citations

1. Roco JA *et al.* 2019. Immunity. 51(2):337-350 . PubMed
2. Clement M, *et al.* 2016. PLoS Pathog. 12:e1006050. PubMed
3. Piper CJM, *et al.* 2020. Cell Reports. 29(7):1878-1892.e7.. PubMed
4. Jtte BB, *et al.* 2021. iScience. 24(8):102833. PubMed
5. Snell LM, *et al.* 2018. Immunity. 49:678. PubMed
6. Venturutti L, *et al.* 2020. Cell. 182(2):297-316.e27. PubMed
7. Roy K, *et al.* 2019. Immunity. 50:616. PubMed
8. Zhu H, *et al.* 2019. Nat Commun. 10:1084. PubMed
9. Cho S, *et al.* 2018. Nat Commun. 9:2757. PubMed
10. Sanchez HN, *et al.* 2020. Nat Commun. 0.5. PubMed
11. Di Pilato M, *et al.* 2021. Cell. 184(17):4512-4530.e22. PubMed
12. Kunishita Y, *et al.* 2020. Front Immunol. 11:98. PubMed

RRID	AB_2565617 (BioLegend Cat. No. 150003) AB_2565618 (BioLegend Cat. No. 150004)

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	Plasma cells, T cells, NK cells, B 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

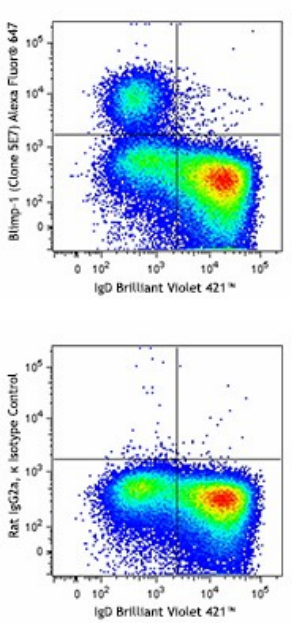
True-Nuclear™ Transcription Factor Staining Protocol for 96-Well U Bottom Plate

True-Nuclear™ Transcription Factor Staining Protocol for 5mL Tubes

Other Formats

Alexa Fluor® 647 anti-mouse Blimp-1, PE anti-mouse Blimp-1, APC anti-mouse Blimp-1

Product Data



Balb/c spleen cells were cultured four days in presence of LPS, then were stained with CD45R/B220 PE and IgD Brilliant Violet 421™, followed by fixation and permeabilization with True-Nuclear™ Transcription Factor Buffer Set, and staining with Blimp-1 (clone 5E7) Alexa Fluor® 647 (top) or rat IgG2a, κ Alexa Fluor® 647 isotype control (bottom).

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