

## Alexa Fluor® 647 anti-mouse Blimp-1 Antibody

<b>Catalog# / Size</b>	150003 / 25 µg 150004 / 100 µg
<b>Clone</b>	5E7
<b>Regulatory Status</b>	RUO
<b>Other Names</b>	PR domain zinc finger protein 1, B lymphocyte-induced maturation protein-1, PRDM1, BLIMP1, PRDI-BF1, ZNFPR1A1, PRDM-1, BLIMP1
<b>Isotype</b>	Rat IgG2a, κ
<b>Description</b>	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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<b>Verified Reactivity</b>	Mouse
<b>Antibody Type</b>	Monoclonal
<b>Host Species</b>	Rat
<b>Immunogen</b>	Amino acids 255-395 from mouse Blimp-1 fused with GST.
<b>Formulation</b>	Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide.
<b>Preparation</b>	The antibody was purified by affinity chromatography and conjugated with Alexa Fluor® 647 under optimal conditions.
<b>Concentration</b>	0.5 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="#">ICFC - Quality tested</a> <a href="#">WB - Reported in the literature, not verified in house</a>
<b>Recommended Usage</b>	Each lot of this antibody is quality control tested by intracellular flow cytometry using our <a href="#">True-Nuclear™ Transcription Factor Staining Protocol</a> . 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.

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<b>Excitation Laser</b>	Red Laser (633 nm)
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#### Product Citations

1. Roco JA *et al.* 2019. *Immunity*. 51(2):337-350 . [PubMed](#)
2. Piper CJM, *et al.* 2020. *Cell Reports*. 29(7):1878-1892.e7.. [PubMed](#)
3. Clement M, *et al.* 2016. *PLoS Pathog.* 12:e1006050. [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

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<b>Structure</b>	Five Kruppel-type zinc finger domains, 98 kD.
<b>Distribution</b>	Plasma cells, CD4 <sup>+</sup> and CD8 <sup>+</sup> effector/memory T cells, and natural killer cells.
<b>Function</b>	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.
<b>Cell Type</b>	Plasma cells, T cells, NK cells, B cells
<b>Biology Area</b>	Cell Biology, Immunology, Transcription Factors
<b>Antigen References</b>	<ol style="list-style-type: none"><li>1. Nakaki F, <i>et al.</i> 2013. <i>Nature</i> 501:222.</li><li>2. Crotty S, <i>et al.</i> 2010. <i>Nat. Immunol.</i> 11:114.</li><li>3. Zhao WL, <i>et al.</i> 2008. <i>Blood</i> 111:3867.</li><li>4. Climmino L, <i>et al.</i> 2008. <i>J. Immunol.</i> 181:2338.</li><li>5. Martins, G and Clarne, K. 2008. <i>Annu. Rev. Immunol.</i> 26:133.</li></ol>
<b>Gene ID</b>	<a href="#">12142</a>

## Related Protocols

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[True-Nuclear™ Transcription Factor Staining Protocol for 96-Well U Bottom Plate](#)

[True-Nuclear™ Transcription Factor Staining Protocol for 5mL Tubes](#)

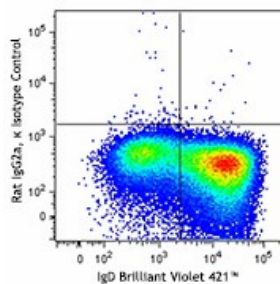
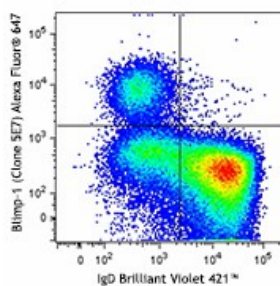
## Other Formats

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

## Product Data

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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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