

# CD249 (BP-1) Monoclonal Antibody (6C3), eBioscience™

## Product Details

Size	100 µg
Species Reactivity	Mouse
Published Species	Mouse
Host/Isotype	Rat / IgG2a, kappa
Class	Monoclonal
Type	Antibody
Clone	6C3
Conjugate	Unconjugated
Form	Liquid
Concentration	0.5 mg/mL
Purification	Affinity chromatography
Storage buffer	PBS, pH 7.2
Contains	0.09% sodium azide
Storage conditions	4° C
RRID	AB_467689

Applications	Tested Dilution	Publications
Immunohistochemistry (IHC)	Assay-Dependent	1 Publication
Flow Cytometry (Flow)	1 µg/test	9 Publications
Immunoprecipitation (IP)	Assay-Dependent	-

## Product Specific Information

**Description:** The 6C3 monoclonal antibody reacts with mouse BP-1, also known as Ly-51 and 6C3 antigen. BP-1 is a 140 kDa type II transmembrane protein that is present on the surface as a disulfide-linked homodimer. This molecule is an enzyme with aminopeptidase A (APA) activity and is expressed by bone marrow stromal cells, thymic cortical epithelial cells and at early stages of mouse B cell development, on pre-B cells. The low level of BP-1 expression on pre-B cells can be upregulated in the presence of IL-7.

**Applications Reported:** The 6C3 antibody has been reported for use in flow cytometric analysis, immunoprecipitation, and immunohistochemical staining.

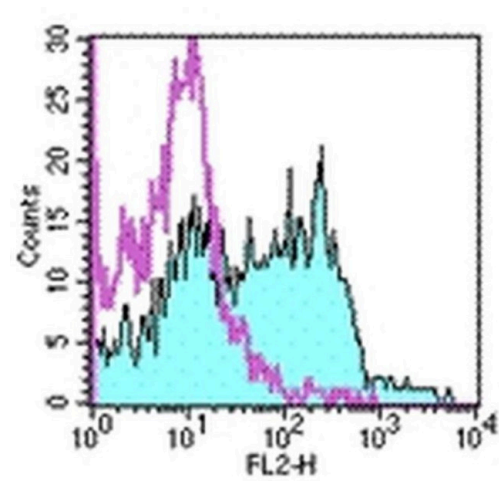
**Applications Tested:** The 6C3 antibody has been tested by flow cytometric analysis of mouse bone marrow cells. This can be used at less than or equal to 1 µg per test. A test is defined as the amount (µg) of antibody that will stain a cell sample in a final volume of 100 µL. Cell number should be determined empirically but can range from 10<sup>5</sup> to 10<sup>8</sup> cells/test. It is recommended that the antibody be carefully titrated for optimal performance in the assay of interest.

**Purity:** Greater than 90%, as determined by SDS-PAGE.

**Aggregation:** Less than 10%, as determined by HPLC.

**Filtration:** 0.2 µm post-manufacturing filtered.

Product Images For CD249 (BP-1) Monoclonal Antibody (6C3), eBioscience™



**CD249 (BP-1) Antibody (14-5891-82) in Flow**  
Staining of BALB/c bone marrow cells with 0.5 µg of Rat IgG2a K Isotype Control Purified (Product # 14-4321-82) (open histogram) or 0.5 µg of Anti-Mouse BP-1 Purified (filled histogram) followed by Anti-Rat IgG Biotin (Product # 13-4813-85) and Streptavidin PE (Product # 12-4317-87). Cells in the lymphocyte gate were used for analysis.

View more figures on [thermofisher.com](https://thermofisher.com)

10 References

Immunohistochemistry (1)

<p>Proceedings of the National Academy of Sciences of the United States of America</p> <p><b>Activation-induced cytidine deaminase (AID) promotes B cell lymphomagenesis in Emu-cmyc transgenic mice.</b></p> <p>"14-5891 was used in Immunohistochemistry to investigate whether activation-induced cytidine deaminase plays a role in tumourigenesis."</p> <p>Authors: Kotani A,Kakazu N,Tsuruyama T,Okazaki IM,Muramatsu M,Kinoshita K,Nagaoka H,Yabe D,Honjo T</p>	<p>Year 2007</p> <p>Species Mouse</p>
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Flow Cytometry (9)

<p>Nature communications</p> <p><b>Embryonic keratin19<sup>+</sup> progenitors generate multiple functionally distinct progeny to maintain epithelial diversity in the adult thymus medulla.</b></p> <p>"Published figure using CD249 (BP-1) monoclonal antibody (Product # 14-5891-82) in Flow Cytometry"</p> <p>Authors: Lucas B,White AJ,Klein F,Veiga-Villauriz C,Handel A,Bacon A,Cosway EJ,James KD,Parnell SM,Ohigashi I,Takahama Y,Jenkinson WE,Hollander GA,Lu WY,Anderson G</p>	<p>Year 2023</p>
<p>Nature immunology</p> <p><b>Rapid chromatin repression by Aire provides precise control of immune tolerance.</b></p> <p>"14-5891 was used in Flow cytometry/Cell sorting to demonstrate that Brg1 and Aire fine-tune the expression of tissue-specific genes at levels that prevent toxicity yet promote immune tolerance."</p> <p>Authors: Koh AS,Miller EL,Buenrostro JD,Moskowitz DM,Wang J,Greenleaf WJ,Chang HY,Crabtree GR</p>	<p>Year 2018</p> <p>Species Mouse</p>

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