

Blimp-1 Monoclonal Antibody (6D3), eBioscience™

Product Details

Size	100 µg
Species Reactivity	Human, Mouse
Published Species	Mouse, Human
Host/Isotype	Rat / IgG2a
Class	Monoclonal
Type	Antibody
Clone	6D3
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_1907437

Applications	Tested Dilution	Publications
Western Blot (WB)	1-10 µg/mL	8 Publications
Immunohistochemistry (IHC)	-	8 Publications
Immunohistochemistry (Paraffin) (IHC (P))	10 µg/mL	2 Publications
Immunohistochemistry (Frozen) (IHC (F))	-	1 Publication
Immunocytochemistry (ICC/IF)	-	4 Publications
Flow Cytometry (Flow)	(0.5 µg)/test	1 Publication
ChIP assay (ChIP)	-	2 Publications

Product Specific Information

Description: This 6D3 monoclonal antibody reacts with B lymphocyte-induced maturation protein-1 (Blimp-1), a transcriptional repressor expressed in B and T cells. This approximately 90-kDa protein contains five consecutive Kruppel-like zinc finger domains by which it binds DNA. In B cells, Blimp-1 promotes terminal differentiation into antibody-secreting plasma cells during a primary immune response. In addition, Blimp-1 has been implicated in germinal center formation in response to T-dependent and T-independent antigens, as well as in some diffuse large B cell lymphomas. Expressed in CD4+ and CD8+ effector/memory T cells and FoxP3+ regulatory T cells, reports have suggested possible roles for Blimp-1 in T cell homeostasis and suppression of IL-2 production. Moreover, by suppressing Th1 differentiation, Blimp-1 plays a role in T helper cell differentiation. Finally, Blimp-1 has been demonstrated to play a significant role in the terminal differentiation of effector and effector memory CD8+ T cells during viral infection.

Applications Reported: This 6D3 antibody has been reported for use in immunoblotting (WB) and immunohistology staining of paraffin-embedded tissue sections.

Applications Tested: This 6D3 antibody has been tested by western blot of reduced A20 cell lysates. For western blotting, this antibody can be used at 1-10 µg/mL. Moreover, this antibody was tested by immunohistochemistry of formalin-fixed paraffin embedded human tonsil tissue. Antigen retrieval was performed using 10mM citrate buffer at pH 6.0. For immunohistochemistry, this antibody can be used at 10 µg/mL. It is recommended that the antibody be carefully titrated for

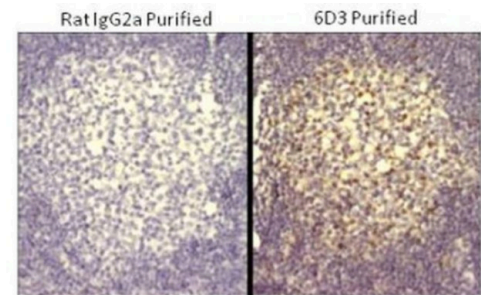
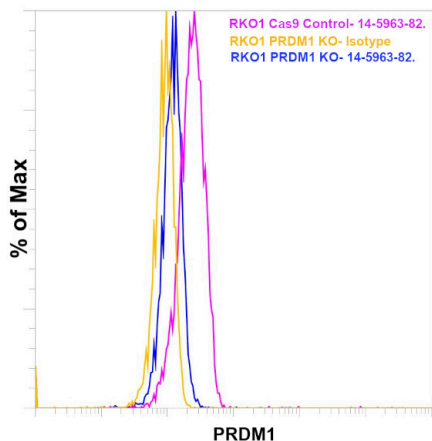
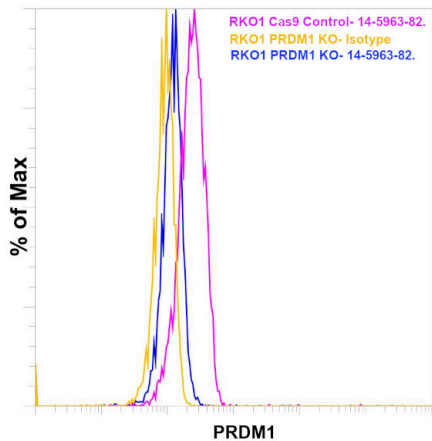
optimal performance in the assay of interest.

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 Blimp-1 Monoclonal Antibody (6D3), eBioscience™



Blimp-1 Antibody (14-5963-82)

Antibody clone (6D3) specificity was demonstrated by CRISPR-Cas9 mediated knockout of target protein. Loss of signal was observed for target protein in Blimp1 KO cells (blue histogram) compared to the control Cas9 cells (pink histogram) using Blimp1 antibody (6D3). Yellow histogram represents staining with the isotype control. {KO}

Blimp-1 Antibody (14-5963-82) in Flow

Knockout of Blimp-1 was achieved by CRISPR-Cas9 genome editing using LentiArray™ Lentiviral sgRNA (Product # A32042, Assay ID CRISPR 965410_LV) and LentiArray Cas9 Lentivirus (Product # A32064). For Flow cytometry analysis, RKO Blimp-1 Knock out cells were stained intracellularly using the Foxp3 / Transcription Factor Staining Buffer Set Buffer Set (Product # 00-5523-00) and protocol, with 5 µg/mL Goat anti-rat IgG2a Secondary Antibody (Product # PA1-84755, yellow histogram) or 5 µg/mL Blimp-1 Monoclonal Antibody (6D3), eBioscience (Product # 14-5963-82, blue histogram) followed by (Product # , 1:1000). RKO Cas9 control cells were also stained similarly with 0.5 mg/mL Blimp-1 Monoclonal Antibody (E.995.1) (Product # 14-5963-82, pink histogram) followed by the secondary antibody. Loss of signal was observed in the Blimp-1 KO cells stained with Blimp-1 antibody clone (E.995.1) but not in the control Cas9 cells. Viable cells were used for analysis, as determined by Fixable Viability Dye eFluor™ 780 (Product # 65-0865-18).

Blimp-1 Antibody (14-5963-82) in IHC (P)

Immunohistochemistry on formalin-fixed paraffin embedded human tonsil tissue with citrate buffer antigen retrieval, using 10 µg/mL of Anti-Human/Mouse Blimp1 Purified or 10 µg/mL of Rat IgG2a kappa Isotype Control Purified (Product # 14-4321-82) followed by Anti-Rat IgG Biotin, and DAB visualization.

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Western Blot (8)

<p>The Journal of clinical investigation</p> <p>MEF2D sustains activation of effector Foxp3+ Tregs during transplant survival and anticancer immunity.</p> <p>"14-5963 was used in Western Blotting to study the role played by MEF2D in sustaining effector Foxp3+ Treg functions without abrogating their basal actions suggests its suitability for drug discovery efforts in cancer therapy."</p> <p>Authors: Di Giorgio E,Wang L,Xiong Y,Akimova T,Christensen LM,Han R,Samanta A,Trevisanut M,Bhatti TR,Beier UH, Hancock WW</p>	<p>Year 2020</p> <p>Species Mouse</p>
<p>The Journal of experimental medicine</p> <p>The aryl hydrocarbon receptor controls cell-fate decisions in B cells.</p> <p>"14-5963 was used in Western Blotting to show that the aryl hydrocarbon receptor is highly induced upon B cell activation and serves a critical role in regulating activation-induced cell fate outcomes."</p> <p>Authors: Vaidyanathan B,Chaudhry A,Yewdell WT,Angeletti D,Yen WF,Wheatley AK,Bradfield CA,McDermott AB, Yewdell JW,Rudensky AY,Chaudhuri J</p>	<p>Year 2017</p> <p>Species Mouse</p>

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Immunohistochemistry (8)

<p>Theranostics</p> <p>Single-cell Transcriptome Profiling reveals Dermal and Epithelial cell fate decisions during Embryonic Hair Follicle Development.</p> <p>"Published figure using Blimp-1 monoclonal antibody (Product # 14-5963-82) in Immunohistochemistry"</p> <p>Authors: Ge W,Tan SJ,Wang SH,Li L,Sun XF,Shen W,Wang X</p>	<p>Year 2021</p>
<p>Disease models & mechanisms</p> <p>Murine myeloid cell MCP1P1 suppresses autoimmunity by regulating B-cell expansion and differentiation.</p> <p>"14-5963-82 was used in Immunohistochemistry (Paraffin) to show that depletion of MCP1P1 in macrophages and granulocytes (Mcp1fl/fl-LysMcre+ C57BL/6 mice) is sufficient to trigger severe autoimmune disease."</p> <p>Authors: Dobosz E,Lorenz G,Ribeiro A,Wülf V,Wadowska M,Kotlinowski J,Schmaderer C,Potempa J,Fu M,Koziel J, Lech M</p>	<p>Year 2021</p> <p>Species Mouse</p> <p>Dilution 1:100</p>

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More applications with references on thermofisher.cn

- IHC (P) (2)
- IHC (F) (1)
- ICC/IF (4)
- Flow (1)
- ChIP (2)

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