

An Affymetrix Company

Anti-Human/Mouse Blimp1 Purified

Catalog Number: 14-5963

Also known as: Blimp-1, PRDM1, PRDIBF1

RUO: For Research Use Only. Not for use in diagnostic procedures.

Product Information

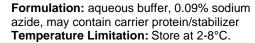
Contents: Anti-Human/Mouse Blimp1

Purified

REF Catalog Number: 14-5963

Clone: 6D3

Concentration: 0.5 mg/mL **Host/Isotype:** Rat IgG2a



Batch Code: Refer to vial **Use By:** Refer to vial

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 paraffinembedded tissue sections.

Applications Tested

This 6D3 antibody has been tested by western blot of reduced A20 cell lysates. For western blottiing, this antibody can be used at 1-10 μ g/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 μ g/mL. It is recommended that the antibody be carefully titrated for optimal performance in the assay of interest.

References

Kallies A, Xin A, Belz GT, Nutt SL. Blimp-1 transcription factor is required for the differentiation of effector CD8(+) T cells and memory responses. Immunity. 2009 Aug 21;31(2):283-95.

Ciimmino L, Martins GA, Liao J, Magnusdottir E, Grunig G, Perez RK, Calame KL. Blimp-1 attenuates Th1 differentiation by repression of ifng, tbx21, and bcl6 gene expression. J Immunol. 2008 Aug 15;181(4):2338-47.

Martins G, Calame K. Regulation and functions of Blimp-1 in T and B lymphocytes. Annu Rev Immunol. 2008;26:133-69. Review.

Kallies A, Hawkins ED, Belz GT, Metcalf D, Hommel M, Corcoran LM, Hodgkin PD, Nutt SL.Transcriptional repressor Blimp-1 is essential for T cell homeostasis and self-tolerance. Nat Immunol. 2006 May;7(5):466-74.

Shapiro-Shelef M, Lin KI, McHeyzer-Williams LJ, Liao J, McHeyzer-Williams MG, Calame K. Blimp-1 is required for the formation of immunoglobulin secreting plasma cells and pre-plasma memory B cells.

Related Products

14-4321 Rat IgG2a K Isotype Control Purified (eBR2a)



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