

Blimp-1 (h): 293T Lysate: sc-176916

BACKGROUND

The development and differentiation of plasma cells, which are terminally differentiated B cells, are induced by Blimp-1 (B lymphocyte-induced maturation protein, also designated PRDI-BF1). Blimp-1 is a transcriptional repressor that localizes to the nucleus and is considered a master regulator of terminal B cell development. Alone, Blimp-1 is sufficient to trigger terminal B cell differentiation. Blimp-1 upregulates the expression of syndecan-1 and J chain, represses IFN- β gene transcription and associates with HDAC to recruit it to DNA, thereby repressing c-Myc. Blimp-1 is expressed during the late stages of B cell differentiation in immunoglobulin-secreting plasma cells, as well as in long-lived, bone marrow plasma cells. The expression of Blimp-1 defines a checkpoint beyond which fully activated B cells proceed to the plasma cell stage, whereas immature and partially activated cells are eliminated.

REFERENCES

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3. Knödel, M., Kuss, A.W., Lindemann, D., Berberich, I. and Schimpl, A. 1999. Reversal of Blimp-1-mediated apoptosis by Al, a member of the Bcl-2 family. *Eur. J. Immunol.* 29: 2988-2998.
4. Shaffer, A.L., Yu, X., He, Y., Boldrick, J., Chan, E.P. and Staudt, L.M. 2000. Bcl-6 represses genes that function in lymphocyte differentiation, inflammation, and cell cycle control. *Immunity* 13: 199-212.
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6. Yu, J., Angelin-Duclos, C., Greenwood, J., Liao, J. and Calame, K. 2000. Transcriptional repression by Blimp-1 (PRDI-BF1) involves recruitment of histone deacetylase. *Mol. Cell. Biol.* 20: 2592-2603.

CHROMOSOMAL LOCATION

Genetic locus: PRDM1 (human) mapping to 6q21.

PRODUCT

Blimp-1 (h): 293T Lysate represents a lysate of human Blimp-1 transfected 293T cells and is provided as 100 μ g protein in 200 μ l SDS-PAGE buffer.

STORAGE

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. Non-hazardous. No MSDS required.

PROTOCOLS

See our web site at www.scbt.com for detailed protocols and support products.

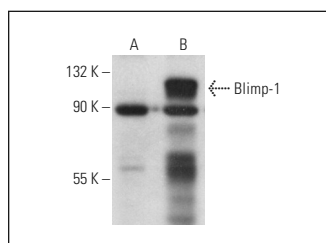
APPLICATIONS

Blimp-1 (h): 293T Lysate is suitable as a Western Blotting positive control for human reactive Blimp-1 antibodies.

Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

Blimp-1 (6D3): sc-47732 is recommended as a positive control antibody for Western Blot analysis of enhanced human Blimp-1 expression in Blimp-1 transfected 293T cells (starting dilution 1:100, dilution range 1:100-1:1,000).

DATA



Blimp-1 (6D3): sc-47732. Western blot analysis of Blimp-1 expression in non-transfected: sc-117752 (A) and human Blimp-1 transfected: sc-176916 (B) 293T whole cell lysates.

RESEARCH USE

For research use only, not for use in diagnostic procedures.