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BCL6 Antibody

Catalog # ASC11528

Product Information

Application	WB, E
Primary Accession	P41182
Other Accession	NP_001124317, 195927002
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Calculated MW	78846
Concentration (mg/ml)	1 mg/mL
Conjugate	Unconjugated
Application Notes	BCL6 antibody can be used for detection of BCL6 by Western blot at 1 □g/mL.

Additional Information

Gene ID	604
Other Names	B-cell lymphoma 6 protein, BCL-6, B-cell lymphoma 5 protein, BCL-5, Protein LAZ-3, Zinc finger and BTB domain-containing protein 27, Zinc finger protein 51, BCL6, BCL5, LAZ3, ZBTB27, ZNF51
Target/Specificity	BCL6; Three alternatively spliced transcript variants have been observed
Reconstitution & Storage	BCL6 antibody can be stored at 4℃ for three months and -20℃, stable for up to one year. As with all antibodies care should be taken to avoid repeated freeze thaw cycles. Antibodies should not be exposed to prolonged high temperatures.
Precautions	BCL6 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	BCL6
Synonyms	BCL5, LAZ3, ZBTB27, ZNF51
Function	Transcriptional repressor mainly required for germinal center (GC) formation and antibody affinity maturation which has different mechanisms of action specific to the lineage and biological functions. Forms complexes with different corepressors and histone deacetylases to repress the transcriptional expression of different subsets of target genes. Represses its target genes by binding directly to the DNA sequence 5'-TTCCTAGAA-3' (BCL6-binding site) or indirectly by repressing the transcriptional activity of transcription factors. In GC B-cells, represses genes that function in

	differentiation, inflammation, apoptosis and cell cycle control, also autoregulates its transcriptional expression and up-regulates, indirectly, the expression of some genes important for GC reactions, such as AICDA, through the repression of microRNAs expression, like miR155. An important function is to allow GC B-cells to proliferate very rapidly in response to T- cell dependent antigens and tolerate the physiological DNA breaks required for immunoglobulin class switch recombination and somatic hypermutation without inducing a p53/TP53-dependent apoptotic response. In follicular helper CD4(+) T-cells (T(FH) cells), promotes the expression of T(FH)-related genes but inhibits the differentiation of T(H)1, T(H)2 and T(H)17 cells. Also required for the establishment and maintenance of immunological memory for both T- and B-cells. Suppresses macrophage proliferation through competition with STAT5 for STAT- binding motifs binding on certain target genes, such as CCL2 and CCND2. In response to genotoxic stress, controls cell cycle arrest in GC B- cells in both p53/TP53-dependedent and -independent manners. Besides, also controls neurogenesis through the alteration of the composition of NOTCH-dependent transcriptional complexes at selective NOTCH targets, such as HES5, including the recruitment of the deacetylase SIRT1 and resulting in an epigenetic silencing leading to neuronal differentiation.
Cellular Location	Nucleus
Tissue Location	Expressed in germinal center T- and B-cells and in primary immature dendritic cells.

Background

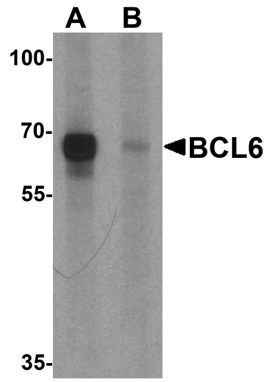
BCL6 Antibody: BCL6 was first identified as a proto-oncogene in diffuse large B cell lymphoma. BCL6, a transcriptional repressor, plays an important role in lymphomagenesis. It binds Stat recognition-like DNA elements and is required for affinity maturation of mature B cells in germinal centers and Th1/Th2 differentiation, a process that critically depends on BCL6-mediated transcriptional repression of p53. BCL6 is a pharmacological target for eradication of leukemia-initiating cells in chronic myeloid leukemia (CML).

References

Ye BH, Chaganti S, Chang CC, et al. Chromosomal translocations cause deregulated BCL6 expression by promoter substitution in B cell lymphoma. EMBO J. 1995; 14:6209-17.
Dent AL, Shaffer AL, Yu X, et al. Control of inflammation, cytokine expression, and germinal center formation by BCL-6. Science1997; 276:589-92.
Ye BH, Cattoretti G, Shen Q, et al. The BCL-6 proto-oncogene controls germinal-centre formation and Th2-type inflammation. Nat. Genet. 1997; 16:161-70.
Hurtz C, Hatzi K, Cerchietti L, et al. BCL6-mediated repression of p53 is critical for leukemia stem cell survival in chronic myeloid leukemia. J. Exp. Med. 2011; 208:2163-74.

Images

Western blot analysis of BCL6 in rat lung tissue lysate with Bcl6 antibody at 1 µg/ml in (A) the absence and (B) the presence of blocking peptide



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