

Bcl-6 Antibody (C-term) Blocking Peptide Synthetic peptide Catalog # BP7372b

## Specification

# **Bcl-6 Antibody (C-term) Blocking Peptide - Product Information**

Primary Accession

### <u>P41182</u>

# **Bcl-6 Antibody (C-term) Blocking Peptide - 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

The synthetic peptide sequence used to generate the antibody <a

href=/products/AP7372b>AP7372b</a> was selected from the C-term region of human Bcl-6. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

Format

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

#### Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

**Precautions** This product is for research use only. Not for use in diagnostic or therapeutic procedures.

### **Bcl-6 Antibody (C-term) Blocking Peptide - 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 immunglobulin 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.

# Bcl-6 Antibody (C-term) Blocking Peptide - Protocols

Provided below are standard protocols that you may find useful for product applications.

Blocking Peptides

# Bcl-6 Antibody (C-term) Blocking Peptide - Images

# Bcl-6 Antibody (C-term) Blocking Peptide - Background

BCL6 is a zinc finger transcription factor and contains an N-terminal POZ domain. This protein acts as a sequence-specific repressor of transcription, and has been shown to modulate the transcription of START-dependent IL-4 responses of B cells. This protein can interact with a variety of POZ-containing proteins that function as transcription corepressors.

### **Bcl-6 Antibody (C-term) Blocking Peptide - References**

Saito, M., Proc. Natl. Acad. Sci. U.S.A. 106 (27), 11294-11299 (2009)Ci, W., Blood 113 (22), 5536-5548 (2009)