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# Anti-Bcl-6 Antibody

Mouse Monoclonal Antibody
Catalog # AH13486

## Product Information

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| **Application** | IHC-P, IF, FC |
| **Primary Accession** | P41182 |
| **Other Accession** | 478588 |
| **Reactivity** | Human |
| **Host** | Mouse |
| **Clonality** | Monoclonal |
| **Isotype** | Mouse / IgG1, kappa |
| **Clone Names** | BCL6/1527 |
| **Calculated MW** | 78846 |

## Additional Information

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| **Gene ID** | 604 |
| **Other Names** | B-cell lymphoma 5 protein; B-Cell Lymphoma 6 Protein; BCL5; BCL6; BCL6A; cys his2 zinc finger transcription factor; Lymphoma Associated Zinc Finger Gene On Chromosome 3 (LAZ3); Zinc finger and BTB domain-containing protein 27 (ZBTB27); Zinc Finger Protein 51 (ZNF51); zinc finger transcription factor BCL6S |
| **Application Note** | Flow Cytometry (0.5-1ug/million cells); Immunofluorescence (1-2ug/ml); ,Immunohistology (Formalin-fixed) (1-2ug/ml for 30 minutes at RT),(Staining of formalin-fixed tissues requires boiling tissue sections in 10mM Tris with 1mM EDTA, pH 9.0, for 10-20 min followed by cooling at RT for 20 minutes),Optimal dilution for a specific application should be determined. |
| **Format** | 200ug/ml of Ab purified from Bioreactor Concentrate by Protein A/G. Prepared in 10mM PBS with 0.05% BSA & 0.05% azide. Also available WITHOUT BSA & azide at 1.0mg/ml. |
| **Storage** | Store at 2 to 8°C.Antibody is stable for 24 months. |
| **Precautions** | Anti-Bcl-6 Antibody is for research use only and not for use in diagnostic or therapeutic procedures. |

## Protein Information

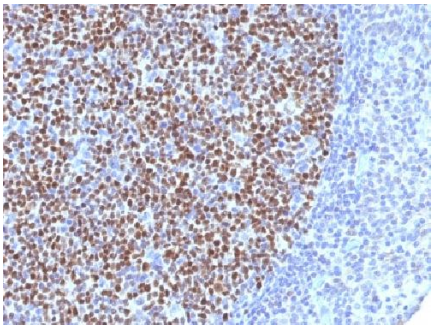
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| **Name** | BCL6 |
| **Synonyms** | BCL5, LAZ3, ZBTB27, ZNF51 |

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| **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

Recognizes a protein of 95kDa, which is identified as Bcl-6. Antibody to bcl-6 is helpful in a number of diagnostic settings: (1) In the differential diagnosis of small B-cell lymphoma. Follicular lymphoma will show bcl-6 (and CD10) positivity whereas other small B-cell lymphomas are usually negative. (2) Bcl-6 is an important prognostic marker in diffuse large B-cell lymphomas (DLBCL), where CD10, bcl-6 and MUM1/IRF4 are used to identify germinal center and activated B-cell phenotypes. (3) Bcl-6 can be valuable in distinguishing classical Hodgkin lymphoma from nodular lymphocyte predominant Hodgkin lymphoma (NLPHL). The Reed-Sternberg cells of classical Hodgkin lymphoma are bcl-6 negative whereas the large ( L&H ) cells of NLPHL are bcl-6 positive. In contrast, anti-Bcl-6 rarely stains mantle-cell lymphoma and MALT lymphoma.

## Images



Formalin-fixed, paraffin-embedded human Tonsil stained with bcl-6 Monoclonal Antibody (BCL6/1527).

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.