

BCL6

Purified Mouse Monoclonal Antibody Catalog # AO2647a

Specification

BCL6 - Product Information

Application E, WB, ICC **Primary Accession** P41182 Reactivity Human Host Mouse Clonality **Monoclonal** Isotype Mouse IgG1 Calculated MW 78.8kDa KDa Immunogen Purified recombinant fragment of human BCL6 (AA: 147-276) expressed in E. Coli.

Formulation Purified antibody in PBS with 0.05% sodium azide

BCL6 - Additional Information

Gene ID 604

Other Names BCL5; LAZ3; BCL6A; ZNF51; ZBTB27

Dilution E~~ 1/10000 WB~~ 1/500 - 1/2000 ICC~~ 1/200 - 1/1000

Storage Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions BCL6 is for research use only and not for use in diagnostic or therapeutic procedures.

BCL6 - 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.

BCL6 - Protocols

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

- <u>Western Blot</u>
- <u>Blocking Peptides</u>
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>
- BCL6 Images

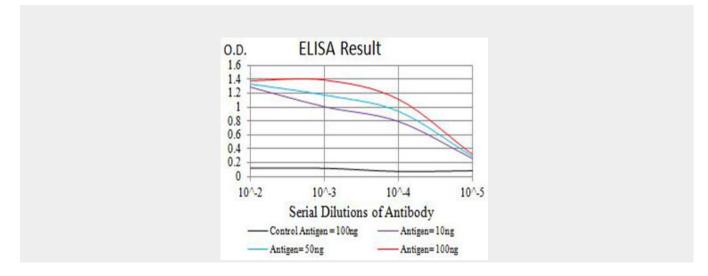




Figure 1:Black line: Control Antigen (100 ng);Purple line: Antigen (10ng); Blue line: Antigen (50 ng); Red line:Antigen (100 ng)

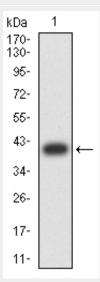


Figure 2:Western blot analysis using BCL6 mAb against human BCL6 (AA: 147-276) recombinant protein. (Expected MW is 40.5 kDa)

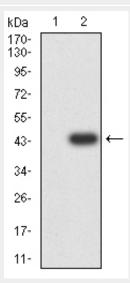


Figure 3:Western blot analysis using BCL6 mAb against HEK293 (1) and BCL6 (AA: 147-276)-hIgGFc transfected HEK293 (2) cell lysate.



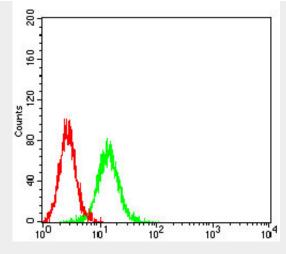


Figure 5:Flow cytometric analysis of K562 cells using BCL6 mouse mAb (green) and negative control (red).

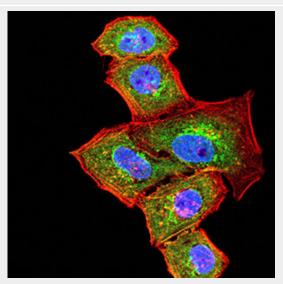


Figure 4:Immunofluorescence analysis of Hela cells using BCL6 mouse mAb (green). Blue: DRAQ5 fluorescent DNA dye. Red: Actin filaments have been labeled with Alexa Fluor- 555 phalloidin. Secondary antibody from Fisher (Cat#: 35503)

BCL6 - References

1.Cancer Lett. 2015 Sep 1;365(2):190-200. 2.BMC Cancer. 2014 Jun 10;14:418.