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BCL6

Purified Mouse Monoclonal Antibody
Catalog # AO2647a

Product Information

Application	WB, IHC, ICC, E
Primary Accession	P41182
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Clone Names	2G1B6
Isotype	Mouse IgG1
Calculated MW	78846
Immunogen	Purified recombinant fragment of human BCL6 (AA: 147-276) expressed in E. Coli.
Formulation	Purified antibody in PBS with 0.05% sodium azide

Additional Information

Gene ID	604
Other Names	BCL5; LAZ3; BCL6A; ZNF51; ZBTB27
Dilution	WB~~ 1/500 - 1/2000 IHC~~1:100~500 ICC~~ 1/200 - 1/1000 E~~ 1/10000
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.

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.

References

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

Images

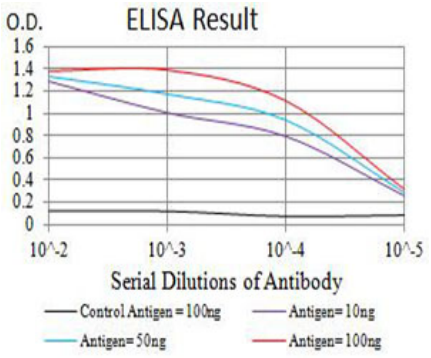


Figure 1:Black line: Control Antigen (100 ng);Purple line: Antigen (10ng); Blue line: Antigen (50 ng); Red line:Antigen (100 ng)

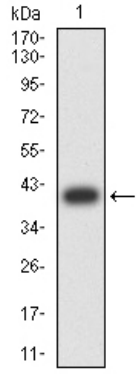


Figure 2:Western blot analysis using BCL6 mAb against human BCL6 (AA: 147-276) recombinant protein. (Expected MW is 40.5 kDa)

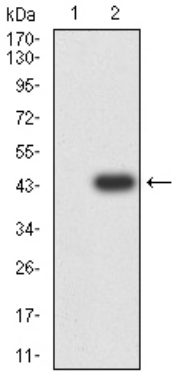


Figure 3:Western blot analysis using BCL6 mAb against HEK293 (1) and BCL6 (AA: 147-276)-hIgGFc transfected HEK293 (2) cell lysate.

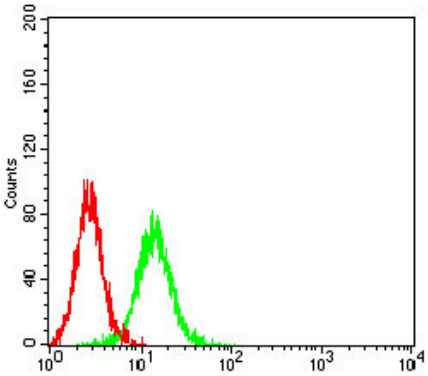


Figure 5:Flow cytometric analysis of K562 cells using BCL6 mouse mAb (green) and negative control (red).

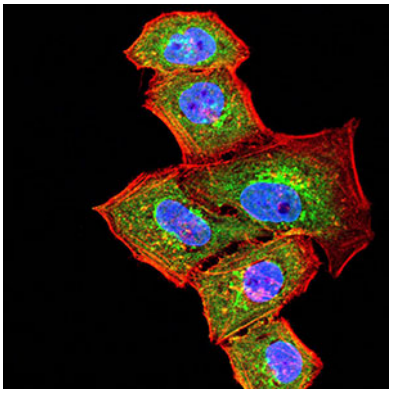


Figure 4:Immunofluorescence analysis of Hela cells using BCL6 mouse mAb (green). Blue: DRAQ5 fluorescent DNA dye. Red: Actin filaments have been labeled with Alexa Fluor- 555 phalloidin. Secondary antibody from Fisher (Cat#: 35503)

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