abcam

ab314099

Anti-Bcl6 antibody [BLR143H] - BSA free

Recombinant

Key facts

Isotype	IgG
Host species	Rabbit
Storage buffer	pH: 7.8 - 8.6 Preservative: 0.09% Sodium azide Constituents: 98% Borate buffered saline
Form	Liquid
Clonality	Monoclonal
Immunogen	Synthetic Peptide within Human BCL6 aa 350-450. The exact immunogen used to generate this antibody is proprietary information. Database link P41182
Clone number	BLR143H

Reactivity data

Flow Cyt

Tested

Species	Human
Dilution info	-
Notes	-

ICC

Tested

Species	Human
Dilution info	-
Notes	-

IHC-P

Tested

Species	Human
Dilution info	-
Notes	-

IP

Tested

Species	Human
Dilution info	-
Notes	-

WB

Tested

Species	Human
Dilution info	-
Notes	-

Target data

See full target information BCL6

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.

Storage

Shipped at conditions	Blue Ice
Appropriate short-term storage duration	Up to 12 months
Appropriate short-term storage conditions	+4°C
Appropriate long-term storage conditions	+4°C

Notes

REACH authorisation
Abcam has not and does not intend to apply for the REACH Authorisation of customers' uses of products that contain European Authorisation list (Annex XIV) substances.
It is the responsibility of our customers to check the necessity of application of REACH Authorisation, and any other relevant authorisations, for their intended uses.

Supplementary info

This supplementary information is collated from multiple sources and compiled automatically.

Activity summary	The Bcl6 protein also known as B-cell lymphoma 6 is a transcriptional repressor important for the germinal center formation in B-cells. It has a molecular weight of approximately 95 kDa. Bcl6 is expressed mainly in B-cells T-cells and certain subsets of dendritic cells. It functions by binding to target DNA sequences where it represses the expression of specific genes leading to controlled cell proliferation

	differentiation and apoptosis. Researchers often study Bcl6 through the use of monoclonal antibodies particularly in immunohistochemistry (IHC).
Biological function summary	Bcl6 plays essential roles in immune response regulation and lymphocyte development. In germinal centers Bcl6 influences the process of somatic hypermutation and class switch recombination in B-cells which is a part of generating antibody diversity. It operates as a central player in a multiprotein complex that includes corepressors such as SMRT and NCoR which facilitate the repression of its target genes. This regulatory action helps maintain the precise balance of immune cell functions.
Pathways	Bcl6 integrates into the B-cell receptor (BCR) signaling and the JAK-STAT pathway. It interacts with molecules like STAT1 and STAT3 positively influencing the survival and proliferation of B-cells. In these pathways Bcl6's activity modulates the transcriptional landscape that determines cell fate decisions affecting cellular processes such as proliferation and survival in response to external cues.
Associated diseases and disorders	Bcl6 is relevant to B cell lymphomas specifically diffuse large B-cell lymphoma (DLBCL) where it is often overexpressed contributing to malignancy by preventing cell death. This pathology frequently involves chromosomal translocations that juxtapose the Bcl6 gene with immunoglobulin genes. The relationship between Bcl6 and other proteins like Bcl2 is noteworthy in this context as Bcl2 inhibits apoptosis further contributing to cancer progression. Mutations and dysregulated expression of Bcl6 have also shown links to autoimmune diseases where its role in cell differentiation and survival may lead to aberrant immune responses.

Product promise

Tested

We have tested this species and application combination and it works. It is covered by our product promise.

Expected

We have not tested this specific species and application combination in-house, but expect it will work. It is covered by our product promise.

Predicted

This species and application combination has not been tested, but we predict it will work based on strong homology. However, this combination is not covered by our product promise.

Not recommended

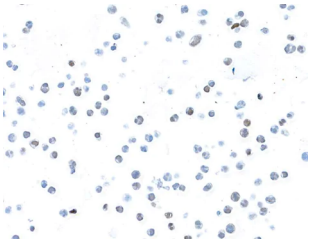
We do not recommend this combination. It is not covered by our product promise.

We are dedicated to supporting your work with high quality reagents and we are here for you every step of the way should you need us.

In the unlikely event of one of our products not working as expected, you are covered by our product promise.

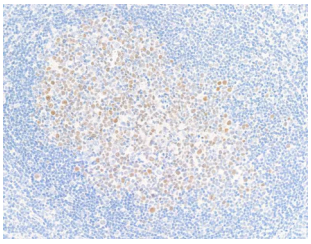
Full details and terms and conditions can be found here:
Terms & Conditions.

5 product images



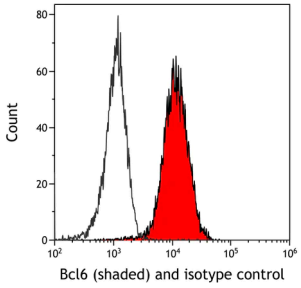
Immunocytochemistry - Anti-Bcl6 antibody [BLR143H] - BSA free (ab314099)

Detection of human Bcl6 in FFPE Raji cells by ICC. Antibody: Rabbit anti-Bcl6 recombinant monoclonal antibody [BLR143H] (A700-143). Secondary: HRP-conjugated goat anti-rabbit IgG. Substrate: DAB.



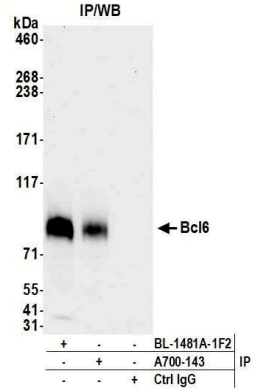
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Bcl6 antibody [BLR143H] - BSA free (ab314099)

Detection of human Bcl6 in FFPE tonsil by IHC. Antibody: Rabbit anti-Bcl6 recombinant monoclonal antibody [BLR143H] (A700-143). Secondary: HRP-conjugated goat anti-rabbit IgG. Substrate: DAB.



Flow Cytometry - Anti-Bcl6 antibody [BLR143H] - BSA free (ab314099)

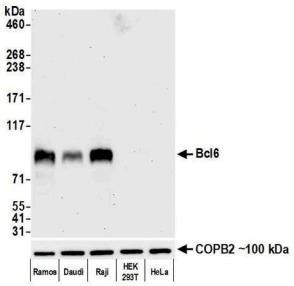
Detection of human Bcl6 (shaded) in Ramos cells by flow cytometry. Antibody: Rabbit anti-Bcl6 recombinant monoclonal [BLR143H] (A700-143) or isotype control (unshaded). Secondary: 488-conjugated goat anti-rabbit IgG.



Immunoprecipitation - Anti-Bcl6 antibody [BLR143H] - BSA free (ab314099)

Samples: Whole cell lysate (1 mg for IP; 5% of IP loaded) from Ramos cells prepared using NETN lysis buffer. Antibodies: Rabbit anti-Bcl6 recombinant monoclonal antibody [BLR143H] (A700-143) used for IP at 6 µl per reaction. Bcl6 was also immunoprecipitated by rabbit anti-Bcl6 antibody BL-1481A-1F2. For blotting immunoprecipitated Bcl6, A700-143 was used at 1:1000. Chemiluminescence with an exposure time of 10 seconds.
All lanes:
Immunoprecipitation - Anti-Bcl6 antibody [BLR143H] - BSA free (ab314099) at 1/1000 dilution

All lanes:
Ramos cells at 1 mg



Western blot - Anti-Bcl6 antibody [BLR143H] - BSA free (ab314099)

Samples:Whole cell lysate (5 µg) from Ramos, Daudi, Raji, HEK293T, and HeLa cells prepared using NETN lysis buffer. Antibody: Rabbit anti-Bcl6 recombinant monoclonal antibody [BLR143H] (A700-143) used at 1:1000. Secondary: HRP-conjugated goat anti-rabbit IgG. Chemiluminescence with an exposure time of 30 seconds. Lower Panel: Rabbit anti-COPB2 antibody.
All lanes:
Western blot - Anti-Bcl6 antibody [BLR143H] - BSA free (ab314099) at 1/1000 dilution

Lane 1:
Ramos Whole cell lysate at 5 µg

Lane 2:
Daudi Whole cell lysate at 5 µg

Lane 3:
Raji Whole cell lysate at 5 µg

Lane 4:
HEK293T Whole cell lysate at 5 µg

Lane 5:
HeLa Whole cell lysate at 5 µg

Secondary

All lanes:
HRP-conjugated goat anti-rabbit IgG

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