Anti-BCL6 Antibody [A6C7-R] - BSA and Azide free

HA610020

Product Type:	Recombinant Mouse monoclonal IgG1, primary antibodies
Species reactivity:	Human
Applications:	IHC-P, IF-Cell
Molecular Wt:	Predicted band size: 79 kDa
Clone number:	A6C7-R

Description: The Bcl-6 protein (B-cell CLL/lymphoma 6, zinc finger protein 51) is a nuclear zinc finger transcription factor with an N-terminal POZ domain. Bcl-6 represses p53 transcription by binding 2 specific DNA sites within the p53 promoter region and accordingly, p53 expression is absent in germinal centre B-cells where Bcl-6 is highly expressed. Most notably, constitutive expression of Bcl-6 protects B-cell lines from apoptosis induced by DNA damage. Bcl-6 is mainly used in the classification of B-cell lymphomas. In malignant lymphomas, Bcl-6 protein is most commonly detected in germinal centre neoplasms including follicular lymphoma, Burkitt lymphoma, diffuse large B-cell lymphoma (40%), lymphocyte predominant Hodgkin lymphoma, and even in peripheral T-cell lymphoma with follicular localization ("follicular T cell lymphoma"). It is also found in CD30+ anaplastic large cell lymphoma. Bcl-6 expression is virtually absent in acute lymphatic leukaemia and mantle cell lymphoma. Normal tonsil is recommended as positive and negative tissue control. Virtually all the germinal centre B-cells must show a moderate to strong nuclear staining reaction, while an at least weak to moderate nuclear staining reaction must be seen in the majority of squamous epithelial cells. In the mantle zones and interfollicular areas only dispersed cells should display a positive nuclear staining reaction.

Immunogen:	Recombinant protein within Human BCL-6 aa 301-500 / 706.
Positive control:	Human B lymphocytoma tissue, human lymph nodes tissue, Raji, Human tonsil.
Subcellular location:	Nucleus.
Database links:	SwissProt: P41182 Human
Recommended Dilutions:	
IHC-P	1:1,000
IF-Cell	1:200
mIHC	1:200
Storage Buffer:	PBS (pH7.4).
Storage Instruction:	Store at +4℃ after thawing. Aliquot store at -20℃. Avoid repeated freeze / thaw cycles.
Purity:	Protein A affinity purified.

Images

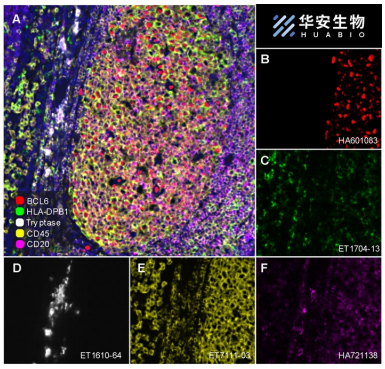

Fig1: Fluorescence multiplex immunohistochemical analysis of Human tonsil (Formalin/PFA-fixed paraffin-embedded sections). Panel A: the merged image of anti-BCL6 (HA610020, Red), anti-HLA-DPB1 (ET1704-13, Green), anti-Tryptase (ET1610-64, White), anti-CD20 (HA721138, Magenta) and anti-CD45 (ET7111-03, Yellow) on tonsil. HRP Conjugated UltraPolymer Goat Polyclonal Antibody HA1119/HA1120 was used as a secondary antibody. The immunostaining was performed with the Sequential Immuno-staining Kit (IRISKit™MH010101, www.luminiris.cn). The section was incubated in five rounds of staining: in the order of HA601083 (1/200 dilution), ET1704-13 (1/2,000 dilution), ET1610-64 (1/5,000 dilution), HA721138 (1/2,000 dilution) and ET7111-03 (1/500 dilution) for 20 mins at room temperature. Each round was followed by a separate fluorescent tyramide signal amplification system. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0) for 30 mins at 95℃. DAPI (blue) was used as a nuclear counter stain. Image acquisition was performed with Olympus VS200 Slide Scanner.

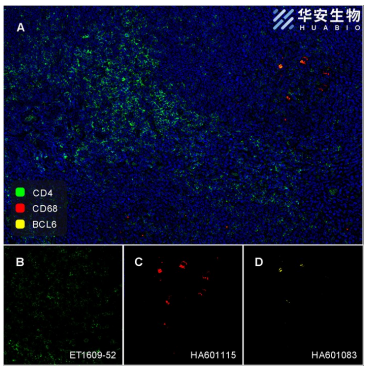

Fig2: Fluorescence multiplex immunohistochemical analysis of human tonsil (Formalin/PFA-fixed paraffin-embedded sections). Panel A: the merged image of anti-CD68 (HA601115, Red), anti-BCL6 (HA610020, Yellow) and anti-CD4 (ET1609-52, Green) on tonsil. HRP Conjugated UltraPolymer Goat Polyclonal Antibody HA1119/HA1120 was used as a secondary antibody. The immunostaining was performed with the Sequential Immuno-staining Kit (IRISKit™MH010101, www.luminiris.cn). The section was incubated in three rounds of staining: in the order of HA601115 (1/2,000 dilution), HA601083 (1/200 dilution) and ET1609-52 (1/800 dilution) for 20 mins at room temperature. Each round was followed by a separate fluorescent tyramide signal amplification system. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0) for 30 mins at 95℃. DAPI (blue) was used as a nuclear counter stain. Image acquisition was performed with Zeiss Observer 7 Inverted Fluorescence Microscope.

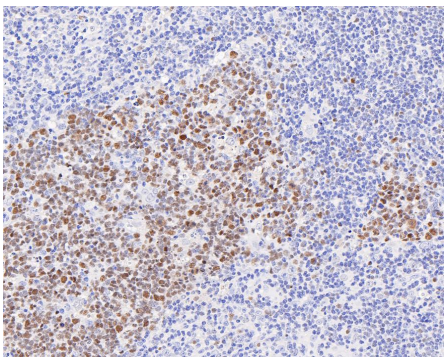

Fig3: Immunohistochemical analysis of paraffin-embedded human B lymphocytoma tissue with Mouse anti-BCL6 antibody (HA610020) at 1/1,000 dilution.

The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0) for 2 minutes. The tissues were blocked in 1% BSA for 20 minutes at room temperature, washed with ddH_2O and PBS, and then probed with the primary antibody (HA610020) at 1/1,000 dilution for 1 hour at room temperature. The detection was performed using an HRP conjugated compact polymer system. DAB was used as the chromogen. Tissues were counterstained with hematoxylin and mounted with DPX.

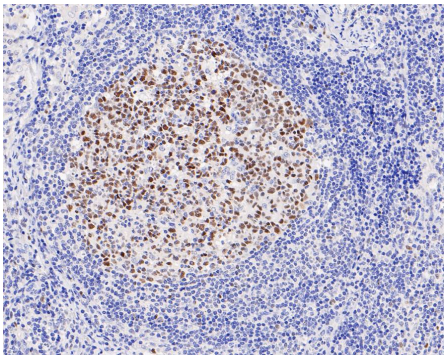

Fig4: Immunohistochemical analysis of paraffin-embedded human lymph nodes tissue with Mouse anti-BCL6 antibody (HA610020) at 1/1,000 dilution.

The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0) for 2 minutes. The tissues were blocked in 1% BSA for 20 minutes at room temperature, washed with ddH_2O and PBS, and then probed with the primary antibody (HA610020) at 1/1,000 dilution for 1 hour at room temperature. The detection was performed using an HRP conjugated compact polymer system. DAB was used as the chromogen. Tissues were counterstained with hematoxylin and mounted with DPX.

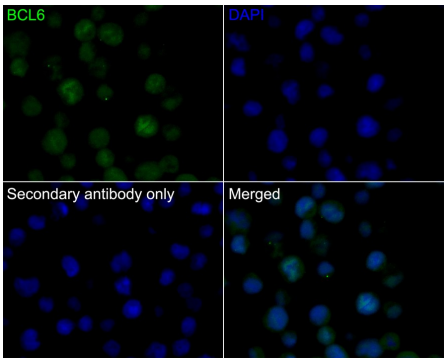

Fig5: Immunocytochemistry analysis of Raji cells labeling BCL6 with Mouse anti-BCL6 antibody (HA610020) at 1/200 dilution.

Cells were fixed in 4% paraformaldehyde for 20 minutes at room temperature, permeabilized with 0.1% Triton X-100 in PBS for 5 minutes at room temperature, then blocked with 1% BSA in 10% negative goat serum for 1 hour at room temperature. Cells were then incubated with Mouse anti-BCL6 antibody (HA610020) at 1/200 dilution in 1% BSA in PBST overnight at 4 ℃. Goat Anti-Mouse IgG H&L (iFluor™ 488, HA1125) was used as the secondary antibody at 1/1,000 dilution. PBS instead of the primary antibody was used as the secondary antibody only control. Nuclear DNA was labelled in blue with DAPI.

Note: All products are "FOR RESEARCH USE ONLY AND ARE NOT INTENDED FOR DIAGNOSTIC OR THERAPEUTIC USE".

Background References

1. Guo J. et. al. BCL6 confers KRAS-mutant non-small-cell lung cancer resistance to BET inhibitors. J Clin Invest. 2021 Jan
2. Leeman-Neill RJ. et. al. BCL6 as a therapeutic target for lymphoma. Expert Opin Ther Targets. 2018 Feb