Anti-Bcl10 Antibody [SN74-04]

ET1611-79

Product Type:	Recombinant Rabbit monoclonal IgG, primary antibodies
Species reactivity:	Human
Applications:	WB, IF-Cell, IF-Tissue, IHC-P, IP
Molecular Wt:	Predicted band size: 26 kDa
Clone number:	SN74-04

Description: B-cell lymphoma/leukemia 10 is a protein that in humans is encoded by the BCL10 gene. Like BCL2, BCL3, BCL5, BCL6, BCL7A, and BCL9, it has clinical significance in lymphoma. Bcl10 was identified by its translocation in a case of mucosa-associated lymphoid tissue (MALT) lymphoma. The protein encoded by this gene contains a caspase recruitment domain (CARD), and has been shown to activate NF-κB. This protein is reported to interact with other CARD and coiled coil domain containing proteins including CARD9, -10, -11 and -14, which are thought to function as upstream regulators in NF-κB signaling. This protein is found to form a complex with the paracaspase MALT1, a protein encoded by another gene known to be translocated in MALT lymphoma. MALT1 and Bcl10 thought to synergize in the activation of NF-κB, and the deregulation of either of them may contribute to the same pathogenetic process that leads to the malignancy. Bcl10 is evolutionary conserved since cnidaria and has been shown to be functionally conserved all the way back to zebrafish. Notably, just like the upstream CARD-CC family, Bcl10 is absent in insects and nematodes, and the correlated phylogenetic distribution of Bcl10 and CARD-CC proteins indicate a conserved complex.

Immunogen:	Synthetic peptide within Human Bcl10 aa 198-233 / 233.
Positive control:	HUVEC cell lysate, A549 cell lysate, Jurkat cell lysate, MCF-7, SW480, human tonsil tissue.
Subcellular location:	Cytoplasm, perinuclear region, Membrane raft.
Database links:	SwissProt: O95999 Human

Recommended Dilutions:

WB	1:500-1:1,000
IF-Cell	1:50-1:200
IF-Tissue	1:50-1:200
IHC-P	1:50-1:200

Storage Buffer:	1*TBS (pH7.4), 0.05% BSA, 40% Glycerol. Preservative: 0.05% Sodium Azide.
Storage Instruction:	Shipped at 4℃. Store at +4℃ short term (1-2 weeks). It is recommended to aliquot into single-use upon delivery. Store at -20℃ long term.
Purity:	Protein A affinity purified.

Images

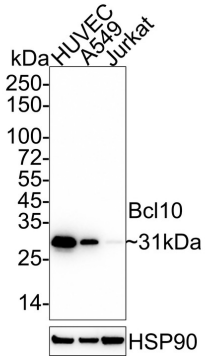

Fig1: Western blot analysis of Bcl10 on different lysates with Rabbit anti-Bcl10 antibody (ET1611-79) at 1/500 dilution.

Lane 1: HUVEC cell lysate
Lane 2: A549 cell lysate
Lane 3: Jurkat cell lysate

Lysates/proteins at 20 µg/Lane.

Predicted band size: 26 kDa
Observed band size: 31 kDa

Exposure time: 50 seconds;

4-20% SDS-PAGE gel.

Proteins were transferred to a PVDF membrane and blocked with 5% NFDM/TBST for 1 hour at room temperature. The primary antibody (ET1611-79) at 1/500 dilution was used in 5% NFDM/TBST at 4℃ overnight. Goat Anti-Rabbit IgG - HRP Secondary Antibody (HA1001) at 1/50,000 dilution was used for 1 hour at room temperature.

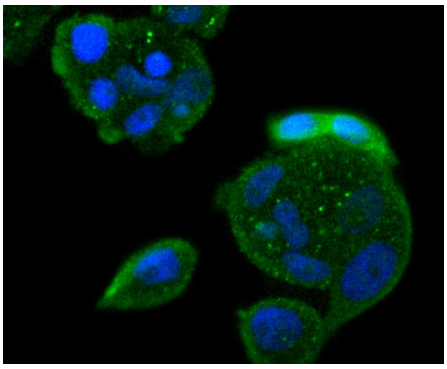

Fig2: ICC staining of Bcl10 in MCF-7 cells (green). Formalin fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 10 minutes at room temperature and blocked with 10% negative goat serum for 15 minutes at room temperature. Cells were probed with the primary antibody (ET1611-79, 1/50) for 1 hour at room temperature, washed with PBS. Alexa Fluor®488 conjugate-Goat anti-Rabbit IgG was used as the secondary antibody at 1/1,000 dilution. The nuclear counter stain is DAPI (blue).

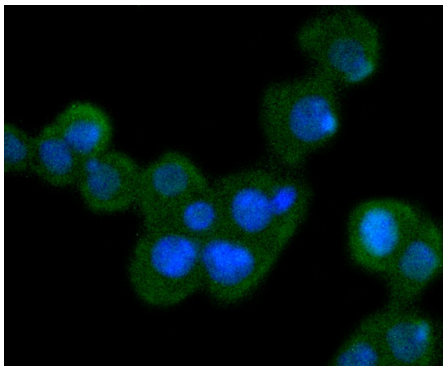

Fig3: ICC staining of Bcl10 in SW480 cells (green). Formalin fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 10 minutes at room temperature and blocked with 10% negative goat serum for 15 minutes at room temperature. Cells were probed with the primary antibody (ET1611-79, 1/50) for 1 hour at room temperature, washed with PBS. Alexa Fluor®488 conjugate-Goat anti-Rabbit IgG was used as the secondary antibody at 1/1,000 dilution. The nuclear counter stain is DAPI (blue).

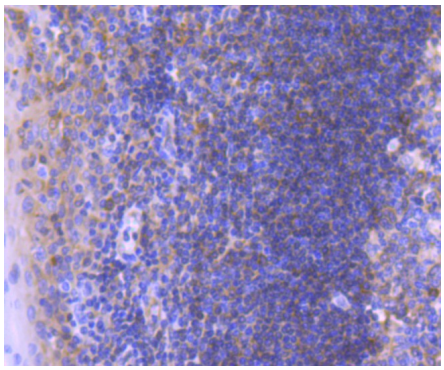

Fig4: Immunohistochemical analysis of paraffin-embedded human tonsil tissue using anti-Bcl10 antibody. The section was pre-treated using heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0) for 20 minutes.The tissues were blocked in 1% BSA for 30 minutes at room temperature, washed with ddH_2O and PBS, and then probed with the primary antibody (ET1611-79, 1/50) for 30 minutes 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.

Background References

1. Alsaidalani AA et al. Inherited Human BCL10 Deficiencies. J Clin Immunol. 2023 Dec
2. Xia M et al. BCL10 Mutations Define Distinct Dependencies Guiding Precision Therapy for DLBCL. Cancer Discov. 2022 Aug