Anti-Bcl10 Antibody [PSH13-49]

HA723538

Product Type:	Recombinant Rabbit monoclonal IgG, primary antibodies
Species reactivity:	Human, Mouse, Rat
Applications:	WB, IF-Cell, FC, IP
Molecular Wt:	Predicted band size: 26 kDa
Clone number:	PSH13-49

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:	Recombinant protein within human Bcl10 aa 1-233.
Positive control:	A20 cell lysate, RAW264.7 cell lysate, EL4 cell lysate, CTLL-2 cell lysate, Ramos cell lysate, Rat brain tissue lysate, Raji, RAW264.7.
Subcellular location:	Cytoplasm, perinuclear region, Membrane raft.
Database links:	SwissProt: O95999 Human | Q9Z0H7 Mouse | Q9QYN5 Rat
Recommended Dilutions:	
WB	1:50,000
IF-Cell	1:100
FC	1:1,000
IP	1-2μg/sample
Storage Buffer:	1*PBS (pH7.4), 0.1% BSA, 40% Glycerol, 0.2% Proclean 950.
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

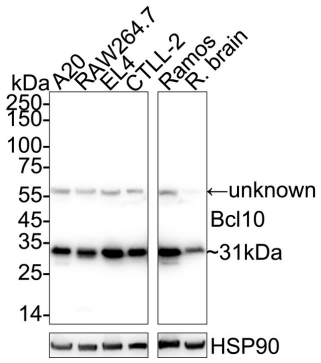

Fig1: Western blot analysis of Bcl10 on different lysates with Rabbit anti-Bcl10 antibody (HA723538) at 1/50,000 dilution.

Lane 1: A20 cell lysate (20 µg/Lane)
Lane 2: RAW264.7 cell lysate (20 µg/Lane)
Lane 3: EL4 cell lysate (20 µg/Lane)
Lane 4: CTLL-2 cell lysate (20 µg/Lane)
Lane 5: Ramos cell lysate (20 µg/Lane)
Lane 6: Rat brain tissue lysate (40 µg/Lane)

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

Exposure time: 14 seconds; ECL: K1801;

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 (HA723538) at 1/50,000 dilution was used in primary antibody dilution (K1803) at 4℃ overnight. Goat Anti-Rabbit IgG - HRP Secondary Antibody (HA1001) at 1/50,000 dilution was used for 1 hour at room temperature.

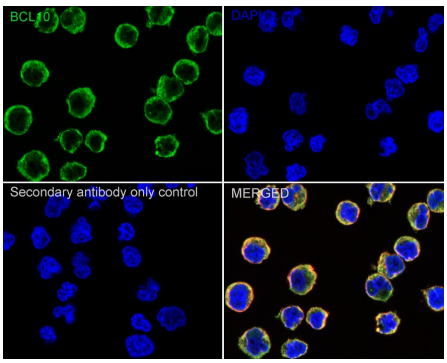

Fig2: Immunocytochemistry analysis of Raji cells labeling Bcl10 with Rabbit anti-Bcl10 antibody (HA723538) at 1/100 dilution.

Cells were fixed in 4% paraformaldehyde for 15 minutes at room temperature, permeabilized with 0.1% Triton X-100 in PBS for 15 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 Rabbit anti-Bcl10 antibody (HA723538) at 1/100 dilution in 1% BSA in PBST overnight at 4 ℃. Goat Anti-Rabbit IgG H&L (iFluor™ 488, HA1121) 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.

Beta tubulin (HA601187, red) was stained at 1/100 dilution overnight at +4℃. Goat Anti-Mouse IgG H&L (iFluor™ 594, HA1126) was used as the secondary antibody at 1/1,000 dilution.

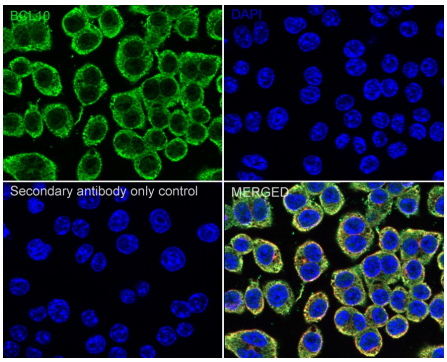

Fig3: Immunocytochemistry analysis of RAW264.7 cells labeling Bcl10 with Rabbit anti-Bcl10 antibody (HA723538) at 1/100 dilution.

Cells were fixed in 4% paraformaldehyde for 15 minutes at room temperature, permeabilized with 0.1% Triton X-100 in PBS for 15 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 Rabbit anti-Bcl10 antibody (HA723538) at 1/100 dilution in 1% BSA in PBST overnight at 4 ℃. Goat Anti-Rabbit IgG H&L (iFluor™ 488, HA1121) 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.

Beta tubulin (HA601187, red) was stained at 1/100 dilution overnight at +4℃. Goat Anti-Mouse IgG H&L (iFluor™ 594, HA1126) was used as the secondary antibody at 1/1,000 dilution.

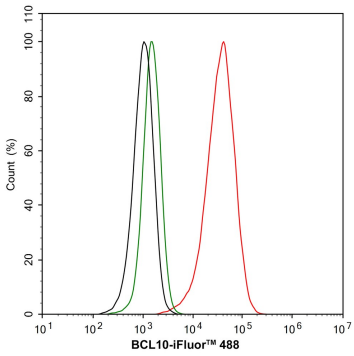

Fig4: Flow cytometric analysis of Raji cells labeling Bcl10.

Cells were fixed and permeabilized. Then stained with the primary antibody (HA723538, 1/1,000) (red) compared with Rabbit IgG Isotype Control (green). After incubation of the primary antibody at +4℃ for an hour, the cells were stained with a iFluor™ 488 conjugate-Goat anti-Rabbit IgG Secondary antibody (HA1121) at 1/1,000 dilution for 30 minutes at +4℃. Unlabelled sample was used as a control (cells without incubation with primary antibody; black).

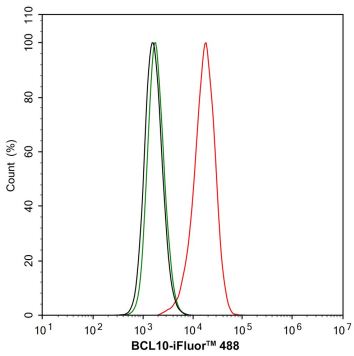

Fig5: Flow cytometric analysis of RAW264.7 cells labeling Bcl10.

Cells were fixed and permeabilized. Then stained with the primary antibody (HA723538, 1/1,000) (red) compared with Rabbit IgG Isotype Control (green). After incubation of the primary antibody at +4℃ for an hour, the cells were stained with a iFluor™ 488 conjugate-Goat anti-Rabbit IgG Secondary antibody (HA1121) at 1/1,000 dilution for 30 minutes at +4℃. Unlabelled sample was used as a control (cells without incubation with primary antibody; black).

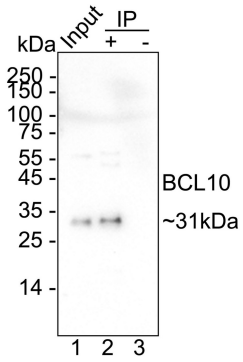

Fig6: Bcl10 was immunoprecipitated from 0.2 mg RAW264.7 cell lysate with HA723538 at 2 µg/10 µl beads. Western blot was performed from the immunoprecipitate using HA723538 at 1/50,000 dilution. HRP Conjugated Anti-Rabbit IgG for IP Nano-secondary antibody at 1/5,000 dilution was used for 1 hour at room temperature.

Lane 1: RAW264.7 cell lysate (input)
Lane 2: HA723538 IP in RAW264.7 cell lysate
Lane 3: Rabbit IgG instead of HA723538 in RAW264.7 cell lysate

Blocking/Dilution buffer: primary antibody dilution (K1803)
Exposure time: 20 seconds; ECL: K1801

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