abcam

**ab36585**

# Anti-Bcl10 antibody [4F8E8H8]

## Key facts

| | |
|---|---|
| **Isotype** | IgG1 |
| **Host species** | Mouse |
| **Storage buffer** | Preservative: 0.05% Sodium azide Constituents: PBS |
| **Form** | Liquid |
| **Clonality** | Monoclonal |
| **Immunogen** | Recombinant Full Length Protein corresponding to Human BCL10. Database link O95999 |
| **Clone number** | 4F8E8H8 |
| **Purification technique** | Affinity purification Protein G |
| **Concentration** | 1 mg/mL The concentration of this product may be batch-dependent<br>Batch concentration finder → |
| **Purification notes** | Purified from tissue culture supernatant. |

## Reactivity data

## Flow Cyt

### Tested

| | |
|---|---|
| **Species** | Human |
| **Dilution info** | 1/200 |
| **Notes** | - |

### Expected

| | |
|---|---|
| **Species** | Mouse |
| **Dilution info** | Use at an assay dependent concentration. |
| **Notes** | - |

## WB

### Tested

| | |
|---|---|
| **Species** | Mouse |
| **Dilution info** | 1/500 - 1/2000 |
| **Notes** | - |

### Expected

| | |
|---|---|
| **Species** | Human |
| **Dilution info** | Use at an assay dependent concentration. |
| **Notes** | - |

## IHC-P

### Tested

| | |
|---|---|
| **Species** | Human |
| **Dilution info** | - |
| **Notes** | - |

### Expected

| | |
|---|---|
| **Species** | Mouse |
| **Dilution info** | Use at an assay dependent concentration. |
| **Notes** | - |

## ICC/IF

### Tested

| | |
|---|---|
| **Species** | Human |
| **Dilution info** | 1/200 - 1/1000 |
| **Notes** | - |

### Expected

| | |
|---|---|
| **Species** | Mouse |
| **Dilution info** | Use at an assay dependent concentration. |
| **Notes** | - |

## Target data

See full target information BCL10

**Function**

Plays a key role in both adaptive and innate immune signaling by bridging CARD domain-containing proteins to immune activation (PubMed:10187770, PubMed:10364242, PubMed:10400625, PubMed:24074955, PubMed:25365219). Acts by channeling adaptive and innate immune signaling downstream of CARD domain-containing proteins CARD9, CARD11 and CARD14 to activate NF-kappa-B and MAP kinase p38 (MAPK11, MAPK12, MAPK13 and/or MAPK14) pathways which stimulate expression of genes encoding pro-inflammatory cytokines and chemokines (PubMed:24074955). Recruited by activated CARD domain-containing proteins: homooligomerized CARD domain-containing proteins form a nucleating helical template that recruits BCL10 via CARD-CARD interaction, thereby promoting polymerization of BCL10, subsequent recruitment of MALT1 and formation of a CBM complex (PubMed:24074955). This leads to activation of NF-kappa-B and MAP kinase p38 (MAPK11, MAPK12, MAPK13 and/or MAPK14) pathways which stimulate expression of genes encoding pro-inflammatory cytokines and chemokines (PubMed:18287044, PubMed:24074955, PubMed:27777308). Activated by CARD9 downstream of C-type lectin receptors; CARD9-mediated signals are essential for antifungal immunity (PubMed:26488816). Activated by CARD11 downstream of T-cell receptor (TCR) and B-cell receptor (BCR) (PubMed:18264101, PubMed:18287044, PubMed:24074955, PubMed:27777308). Promotes apoptosis, pro-caspase-9 maturation and activation of NF-kappa-B via NIK and IKK (PubMed:10187815).

## Storage

| | |
|---|---|
| **Shipped at conditions** | Blue Ice |
| **Appropriate short-term storage conditions** | +4°C |

| | |
|---|---|
| **Appropriate long-term storage conditions** | -20°C |
| **Aliquoting information** | Upon delivery aliquot |
| **Storage information** | Avoid freeze / thaw cycle |

## Supplementary info

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

| | |
|---|---|
| **Activity summary** | Bcl10 also known as B-cell lymphoma 10 is a protein involved in several cellular processes. It has a molecular mass of approximately 26 kDa and shows expression in various lymphoid tissues. Bcl10 plays a significant role in signaling pathways by transmitting signals from the cell surface to the nucleus impacting cell growth and immune responses. Researchers often study Bcl10 using immunohistochemistry (IHC) techniques referred to as Bcl10 IHC to analyze its expression and distribution within tissues. |
| **Biological function summary** | Bcl10 activates downstream signaling pathways that are critical for immune cell functioning and survival. It forms part of the CARD-BCL10-MALT1 (CBM) complex which is important for the activation of the NF-kB pathway. This complex formation is essential for lymphocyte activation and proliferation. Bcl10 interactions within this complex influence cellular responses to various stimuli helping organisms to mount appropriate immune responses. |
| **Pathways** | Bcl10 serves as an integral component in the NF-kB and TCR signaling pathways. It functions alongside proteins such as MALT1 and CARD9 in these pathways. The proper functioning of Bcl10 in these pathways ensures accurate transcriptional regulation necessary for immune responses. Misregulation in these pathways can lead to immune disorders and aberrant cell behavior linking Bcl10 to further biological implications. |
| **Associated diseases and disorders** | Bcl10 shows associations with mucosa-associated lymphoid tissue (MALT) lymphoma and other inflammatory diseases. Aberrant Bcl10 expression or mutations can lead to unchecked activation of NF-kB contributing to the progression of these conditions. In MALT lymphoma Bcl10 often cooperates with MALT1 both contributing to pathological cell survival and proliferation highlighting the importance of Bcl10 in understanding these diseases. |

## 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.

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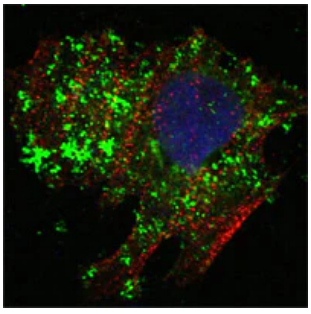
We are dedicated to supporting your work with high quality reagents and we are here for you every step of the way should you need us.

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.

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## 5 product images

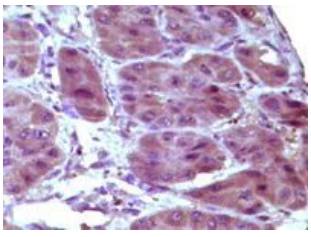


### Immunocytochemistry/ Immunofluorescence - Anti-Bcl10 antibody [4F8E8H8] (ab36585)

Bcl10 Immunocytochemistry/ Immunofluorescence staining using mouse Anti-Bcl10 antibody

ab36585 at 1/1000 dilution staining Bcl10 in human Hela cells by Immunocytochemistry/ Immunofluorescence. Bcl10 show green staining in image and actin filament stained red with Alexa Fluor®555 conjugated secondary. Nuclei stained blue with DRAQ5 fluorescent DNA dye.

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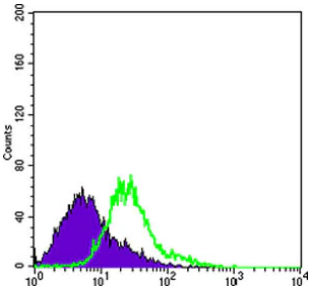


### Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Bcl10 antibody [4F8E8H8] (ab36585)

Bcl10 Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using mouse Anti-Bcl10 antibody

ab36585, at a 1/100 - 1/500 dilution, staining Bcl-10 in paraffin embedded human liver carcinoma tissue by immunohistochemistry with DAB staining.

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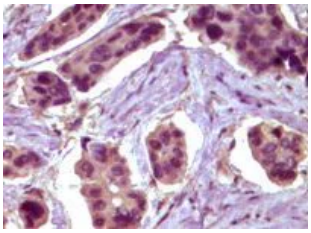



### Flow Cytometry - Anti-Bcl10 antibody [4F8E8H8] (ab36585)

Bcl10 Flow Cytometry staining using mouse Anti-Bcl10 antibody

Flow cytometric analysis of Hela cells using ab36585 at a 1/200 dilution (green) and negative control (purple).

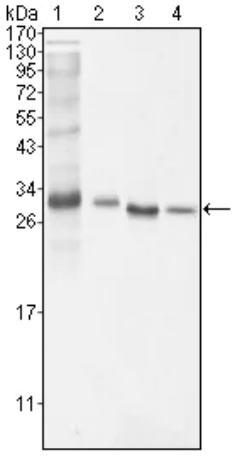
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## Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Bcl10 antibody [4F8E8H8] (ab36585)

Bcl10 Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using mouse Anti-Bcl10 antibody

ab36585, at a 1/100 - 1/500 dilution, staining Bcl-10 in paraffin embedded human breast carcinoma tissue by immunohistochemistry with DAB staining.




## Western blot - Anti-Bcl10 antibody [4F8E8H8] (ab36585)

All lanes:
Western blot - Anti-Bcl10 antibody [4F8E8H8] (ab36585) at 1/500 dilution

Lane 1:
Cell lysates prepared from NIH/3T3 cells at 100 µg

Lane 2:
Cell lysates prepared from Hela cells at 100 µg

Lane 3:
Cell lysates prepared from MCF-7 cells at 100 µg

Lane 4:
Cell lysates prepared from Jurkat cells at 100 µg

Secondary

All lanes:
HRP-conjugated Goat polyclonal to mouse IgG1

Predicted band size: 26 kDa

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