

## BACKGROUND

Bcl10 (B-cell CLL/lymphoma 10) 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 induce apoptosis and promote pro-caspase-9 maturation and to activate NF- $\kappa$ B via NIK and IKK.<sup>1</sup> Bcl10 may be an adapter protein between upstream TNFR1-TRADD-RIP complex and the downstream NIK-IKK-IKAP complex. It is reported to interact with other CARD domain containing proteins including CARD9, 10, 11 and 14, which are thought to function as upstream regulators in NF- $\kappa$ B signaling.<sup>2</sup> This protein is found to form a complex with MALT1, a protein encoded by another gene known to be translocated in MALT lymphoma. It is a substrate for MALT1. MALT1 and Bcl10 are thought to synergize in the activation of NF- $\kappa$ B, and the deregulation of either of them may contribute to the same pathogenetic process that leads to the malignancy.<sup>3</sup>

### References:

1. Wang, L. et al: J. Biol. Chem. 276:21405-9, 2001
2. Zhou, H. et al: Nature 427:167-71, 2004
3. Lucas, P. C. et al: J. Biol. Chem. 276:19012-19, 2001

## TECHNICAL INFORMATION

### Source:

Bcl10 antibody is a mouse monoclonal antibody raised against purified recombinant human Bcl10 protein fragments expressed in *E. coli*.

### Specificity and Sensitivity:

This antibody detects endogenous Bcl10 proteins in normal cell lysates without cross-reactivity with other family members.

**Storage Buffer:** PBS and 30% glycerol

### Storage:

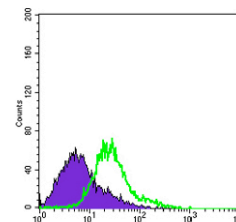
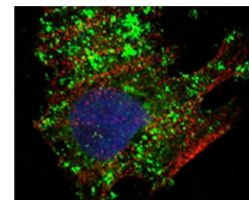
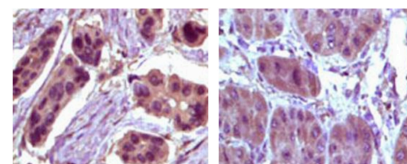
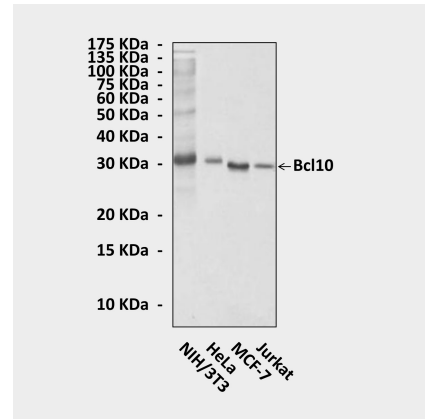
Store at -20°C for at least one year. Store at 4°C for frequent use. Avoid repeated freeze-thaw cycles.

## APPLICATIONS

Application:	*Dilution:
WB	1:500-2000
IP	1:50
IHC	1:200-1000
ICC	1:200-1000
FACS	1:200-400

*\*Optimal dilutions must be determined by end user.*

## QUALITY CONTROL DATA



**Top:** Western Blot detection of Bcl10 proteins in various cell lysates cell lysate using Bcl10 Antibody.

**Middle, upper:** This antibody stains paraffin-embedded human breast carcinoma (left) and hepatoma (right) tissues in immunohistochemical analysis. **Middle, lower:** It also stains HeLa cells in confocal immunofluorescent assay (Green) (Red: actin filaments; Blue: DRQK5 fluorescent DNA dye). **Bottom:** In FACS analysis, it shows to specifically react with Bcl10 proteins in HeLa cells (green) vs. normal mouse IgG control (purple).

