

# Bcl10 (m): 293T Lysate: sc-118789

## BACKGROUND

Bcl10, also designated CIPER, c-CARMEN and mE10, was first identified as a gene truncated or mutated in MALT B cell lymphomas and other tumor types. Bcl10 is homologous to the equine herpesvirus-2 E10 gene and, like E10, it contains an N-terminal caspase recruitment domain (CARD). Expression of Bcl10 has been shown to induce NFκB activation in a NIK-dependent pathway, and research indicates that the CARD domain is essential for this activation; although in a separate study, Bcl10 by itself did not induce JNK or NFκB activation. Overexpression of Bcl10 has been shown to induce apoptosis in a manner dependent on CARD-mediated oligomerization. Bcl10 has also been shown to play a role in processing of caspase-9 to its active dimer. Other studies have shown that Bcl10 is not mutated in many human tumors and lymphomas.

## REFERENCES

1. Ye, H., et al. 2000. Bcl10 expression in normal and neoplastic lymphoid tissue. Nuclear localization in MALT lymphoma. *Am. J. Pathol.* 157: 1147-1154.
2. Ruland, J. et al. 2001. Bcl10 is a positive regulator of antigen receptor-induced activation of NFκB and neural tube closure. *Cell* 104: 33-42.
3. Lucas, P.C., et al. 2001. Bcl10 and MALT1, independent targets of chromosomal translocation in MALT lymphoma, cooperate in a novel NFκB signaling pathway. *J. Biol. Chem.* 276: 19012-19019.
4. Yui, D., et al. 2001. Interchangeable binding of Bcl10 to TRAF2 and cIAPs regulates apoptosis signaling. *Oncogene* 20: 4317-4323.
5. Thome, M., et al. 2002. Bcl10. *Curr. Biol.* 12: R45.
6. Zhou, H., et al. 2004. Bcl10 activates the NFκB pathway through ubiquitination of NEMO. *Nature* 427: 167-171.
7. Fischer, K.D., et al. 2004. New roles for Bcl10 in B cell development and LPS response. *Trends Immunol.* 25: 113-116.
8. Scharschmidt, E., et al. 2004. Degradation of Bcl10 induced by T cell activation negatively regulates NFκB signaling. *Mol. Cell. Biol.* 24: 3860-3873.
9. Liu, Y. et al. 2004. Bcl10 mediates lipopolysaccharide/toll-like receptor-4 signaling through interaction with Pellino2. *J. Biol. Chem.* 279: 37436-37444.

## CHROMOSOMAL LOCATION

Genetic locus: Bcl10 (mouse) mapping to 3 H2.

## PRODUCT

Bcl10 (m): 293T Lysate represents a lysate of mouse Bcl10 transfected 293T cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

## STORAGE

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. Non-hazardous. No MSDS required.

## RESEARCH USE

For research use only, not for use in diagnostic procedures.

## APPLICATIONS

Bcl10 (m): 293T Lysate is suitable as a Western Blotting positive control for mouse reactive Bcl10 antibodies. Recommended use: 10-20 µl per lane.

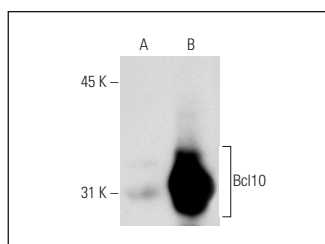
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

Bcl10 (4F8E8H8): sc-32808 is recommended as a positive control antibody for Western Blot analysis of enhanced mouse Bcl10 expression in Bcl10 transfected 293T cells (starting dilution 1:100, dilution range 1:100-1:1,000).

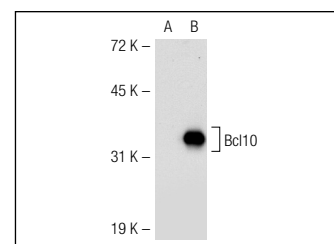
## RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048.

## DATA



Bcl10 (4F8E8H8): sc-32808. Western blot analysis of Bcl10 expression in non-transfected: sc-117752 (A) and mouse Bcl10 transfected: sc-118789 (B) 293T whole cell lysates.



Bcl10 (331.3): sc-5273. Western blot analysis of Bcl10 expression in non-transfected: sc-117752 (A) and mouse Bcl10 transfected: sc-118789 (B) 293T whole cell lysates.

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) for detailed protocols and support products.