

## Bcl-7b (P-14): sc-138144

### BACKGROUND

Bcl-7b (B-cell CLL/lymphoma 7B) is a 202 amino acid protein that exists as multiple alternatively spliced isoforms and belongs to the Bcl-7 family. Expressed ubiquitously, Bcl-7b is thought to play a role in the development and progression of lung tumors, suggesting a possible role in cell cycle or apoptotic control. Haploinsufficiency of the Bcl-7b gene is associated with the pathogenesis of certain cardiovascular and musculo-skeletal abnormalities observed in Williams-Beuren syndrome (WBS). Additionally, Bcl-7b may cause an allergic reaction in humans, specifically by binding to IgE in atopic dermatitis patients and functioning as an autoantigen. The gene encoding Bcl-7b maps to human chromosome 7, which houses over 1,000 genes and comprises nearly 5% of the human genome. Defects in some of the genes localized to chromosome 7 have been linked to osteogenesis imperfecta, Williams-Beuren syndrome, Pendred syndrome, lissencephaly, citrullinemia and Shwachman-Diamond syndrome.

### REFERENCES

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- Jadayel, D.M., et al. 1998. The BCL7 gene family: deletion of BCL7B in Williams syndrome. *Gene* 224: 35-44.
- Meng, X., et al. 1998. Complete physical map of the common deletion region in Williams syndrome and identification and characterization of three novel genes. *Hum. Genet.* 103: 590-599.
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### CHROMOSOMAL LOCATION

Genetic locus: BCL7B (human) mapping to 7q11.23; Bcl7b (mouse) mapping to 5 G2.

### SOURCE

Bcl-7b (P-14) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping within an internal region of Bcl-7b of human origin.

### PRODUCT

Each vial contains 100 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-138144 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

### APPLICATIONS

Bcl-7b (P-14) is recommended for detection of Bcl-7b of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:50-1:500), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:25, dilution range 1:25-1:250) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000); non cross-reactive with Bcl-7a or Bcl-7c.

Bcl-7b (P-14) is also recommended for detection of Bcl-7b in additional species, including canine and porcine.

Suitable for use as control antibody for Bcl-7b siRNA (h): sc-89728, Bcl-7b siRNA (m): sc-141672, Bcl-7b shRNA Plasmid (h): sc-89728-SH, Bcl-7b shRNA Plasmid (m): sc-141672-SH, Bcl-7b shRNA (h) Lentiviral Particles: sc-89728-V and Bcl-7b shRNA (m) Lentiviral Particles: sc-141672-V.

Molecular Weight (predicted) of Bcl-7b: 22 kDa.

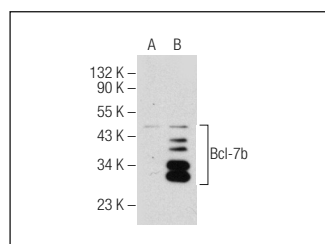
Molecular Weight (observed) of Bcl-7b: 32 kDa

Positive Controls: Bcl-7b (h): 293T Lysate: sc-111318.

### RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker<sup>™</sup> compatible goat anti-rabbit IgG-HRP: sc-2030 (dilution range: 1:2000-1:5000), Cruz Marker<sup>™</sup> Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz<sup>™</sup> Mounting Medium: sc-24941.

### DATA



Bcl-7b (P-14): sc-138144. Western blot analysis of Bcl-7b expression in non-transfected: sc-110760 (A) and human Bcl-7b transfected: sc-111318 (B) 293 whole cell lysates.

### STORAGE

Store at 4° C, **\*\*DO NOT FREEZE\*\***. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

### RESEARCH USE

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