

Bcl-B (G-13): sc-167193

BACKGROUND

Members of the Bcl-2 family of proteins regulate cell survival by either inhibiting apoptosis or by facilitating the complicated process of cell death. Bcl-B, also known as BCL2L10, Diva, Boo or BCLB, is a widely expressed 194 amino acid member of the Bcl-2 protein family. Localized to the nuclear membrane, Bcl-B promotes cell survival by suppressing Bax-induced apoptosis. Bcl-2 contains a BH4 domain as well as a transmembrane domain, both of which are necessary for its antiapoptotic effects. Overexpression of Bcl-B is thought to prevent the release of cytochrome C from the mitochondria, thereby triggering caspase-3 activation and suppressing cell apoptosis. Bcl-B is implicated in the pathogenesis of cervical cancer.

REFERENCES

1. Ke, N., et al. 2001. Bcl-B, a novel Bcl-2 family member that differentially binds and regulates Bax and Bak. *J. Biol. Chem.* 276: 12481-12484.
2. Lee, R., et al. 2001. Characterization of NR13-related human cell death regulator, Boo/Diva, in normal and cancer tissues. *Biochim. Biophys. Acta* 1520: 187-194.
3. Itoh, T., et al. 2003. Bcl-2-related protein family gene expression during oligodendroglial differentiation. *J. Neurochem.* 85: 1500-1512.
4. Yasui, K., et al. 2004. Alteration in copy numbers of genes as a mechanism for acquired drug resistance. *Cancer Res.* 64: 1403-1410.
5. Mikata, R., et al. 2006. Analysis of genes upregulated by the demethylating agent 5-aza-2'-deoxycytidine in gastric cancer cell lines. *Int. J. Cancer* 119: 1616-1622.
6. Vandaele, L., et al. 2008. mRNA expression of Bcl-2, Bax, caspase-3 and -7 cannot be used as a marker for apoptosis in bovine blastocysts. *Anim. Reprod. Sci.* 106: 168-173.

CHROMOSOMAL LOCATION

Genetic locus: BCL2L10 (human) mapping to 15q21.2.

SOURCE

Bcl-B (G-13) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of Bcl-B of human origin.

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-167193 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

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.

APPLICATIONS

Bcl-B (G-13) is recommended for detection of Bcl-B of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for Bcl-B siRNA (h): sc-90043, Bcl-B shRNA Plasmid (h): sc-90043-SH and Bcl-B shRNA (h) Lentiviral Particles: sc-90043-V.

Molecular Weight of Bcl-B: 22 kDa.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.