SANTA CRUZ BIOTECHNOLOGY, INC.

BCL2L12 (P-15): sc-169989



BACKGROUND

Apoptosis is defined as a set of cascades which, when initiated, programs the cell to undergo lethal changes such as membrane blebbing, mitochondrial break down and DNA fragmentation. Bcl-2 is one among many key regulators of apoptosis, which are essential for proper development, tissue homeostasis and protection against foreign pathogens. Human Bcl-2 is an anti-apoptotic, membrane-associated oncoprotein that can promote cell survival through protein-protein interactions with other Bcl-2 related family members, such as the death suppressors Bcl- x_L , Mcl-1, Bcl-w and A1 or the death agonists Bax, Bak, Bik, Bad and Bid. Bcl-2 protein family members form hetero- or homodimers that act as apoptotic regulators that are involved in a variety of cellular activities. BCL2L12, also known as BPR, is a 334 amino acid protein belonging to the Bcl-2 family. Expressed as two isoforms produced by alternative splicing, BCL2L12 is present in prostate, breast, small intestine, pancreas, thymus, colon and spinal chord.

REFERENCES

- Scorilas, A., et al. 2001. Molecular cloning, physical mapping, and expression analysis of a novel gene, BCL2L12, encoding a proline-rich protein with a highly conserved BH2 domain of the Bcl-2 family. Genomics 72: 217-221.
- 2. Hammond, P.W., et al. 2001. *In vitro* selection and characterization of Bcl- x_l -binding proteins from a mix of tissue-specific mRNA display libraries. J. Biol. Chem. 276: 20898-20906.
- Talieri, M., et al. 2003. Expression of BCL2L12, a new member of apoptosisrelated genes, in breast tumors. Thromb. Haemost. 89: 1081-1088.
- Mathioudaki, K., et al. 2004. Expression analysis of BCL2L12, a new member of apoptosis-related genes, in colon cancer. Biol. Chem. 385: 779-783.
- Hong, Y., et al. 2008. Knockdown of BCL2L12 leads to cisplatin resistance in MDA-MB-231 breast cancer cells. Biochim. Biophys. Acta 1782: 649-657.
- Kontos, C.K., et al. 2008. Quantitative expression analysis and prognostic significance of the novel apoptosis-related gene BCL2L12 in colon cancer. Biol. Chem. 389: 1467-1475.
- Stegh, A.H., et al. 2008. BCL2L12-mediated inhibition of effector caspase-3 and caspase-7 via distinct mechanisms in glioblastoma. Proc. Natl. Acad. Sci. USA 105: 10703-10708.
- Yang, J., et al. 2009. HSP 70 protects BCL2L12 and BCL2L12A from Nterminal ubiquitination-mediated proteasomal degradation. FEBS Lett. 583: 1409-1414.

CHROMOSOMAL LOCATION

Genetic locus: BCL2L12 (human) mapping to 19q13.33; Bcl2l12 (mouse) mapping to 7 B4.

SOURCE

BCL2L12 (P-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of BCL2L12 of human origin.

PRODUCT

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

Blocking peptide available for competition studies, sc-169989 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

BCL2L12 (P-15) is recommended for detection of BCL2L12 of mouse, rat and 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).

BCL2L12 (P-15) is also recommended for detection of BCL2L12 in additional species, including equine and bovine.

Suitable for use as control antibody for BCL2L12 siRNA (h): sc-97620, BCL2L12 siRNA (m): sc-141674, BCL2L12 shRNA Plasmid (h): sc-97620-SH, BCL2L12 shRNA Plasmid (m): sc-141674-SH, BCL2L12 shRNA (h) Lentiviral Particles: sc-97620-V and BCL2L12 shRNA (m) Lentiviral Particles: sc-141674-V.

Molecular Weight of BCL2L12: 37 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) Immunofluo-rescence: 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.

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.

PROTOCOLS

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