



Bok (P-20): sc-19302

BACKGROUND

Members of the Bcl-2 family of proteins interact to regulate apoptosis, a process by which multicellular organisms eliminate superfluous cells. Various homodimers and heterodimers formed by proteins in this family either promote or inhibit apoptosis. Bcl-2 blocks cell death following a variety of stimuli and confers a death-sparing effect on certain hematopoietic cell lines following growth factor withdrawal. Bok, or Bcl-2 related ovarian killer, is highly expressed in ovary, testis, uterus and mammary glands. Bok induces apoptosis in cells, which is suppressible by anti-apoptotic human Bcl-2 family proteins. Bok targets mitochondria and triggers cytochrome c release through a caspase-independent mechanism. Bok contains the conserved Bcl-2 homology (BH) domains 1, 2 and 3, but lacks the BH4 domain. Bok selectively heterodimerizes with some anti-apoptotic members of the Bcl-2 protein family, including Mcl-1 and Bfl-1, but it does not appear to interact with Bcl-2, Bcl-x_L and Bcl-w.

REFERENCES

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5. Yang, E., et al. 1996. Molecular thanatopsis: a discourse on the Bcl-2 family and cell death. *Blood* 88: 386-401.
6. Hsu, S.Y., et al. 1997. Bok is a pro-apoptotic Bcl-2 protein with restricted expression in reproductive tissues and heterodimerizes with selective anti-apoptotic Bcl-2 family members. *Proc. Natl. Acad. Sci. USA* 94: 12401-12406.
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8. Hsu, S., et al. 2000. Tissue specific Bcl-2 protein partners in apoptosis: An ovarian paradigm. *Physiol. Rev.* 80: 593-614.
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CHROMOSOMAL LOCATION

Genetic locus: BOK (human) mapping to 2q37.3; Bok (mouse) mapping to 1 D.

SOURCE

Bok (P-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of Bok 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-19302 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

Bok (P-20) is recommended for detection of Bok 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).

Suitable for use as control antibody for Bok siRNA (h): sc-37300, Bok siRNA (m): sc-37301, Bok shRNA Plasmid (h): sc-37300-SH, Bok shRNA Plasmid (m): sc-37301-SH, Bok shRNA (h) Lentiviral Particles: sc-37300-V and Bok shRNA (m) Lentiviral Particles: sc-37301-V.

Molecular Weight of Bok: 23 kDa.

Positive Controls: HT-1080 whole cell lysate: sc-364183.

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.

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.