

# Diva (A-18): sc-8739

## BACKGROUND

Diva (also designated Boo, BCL2L10, BCL-B, Bcl-2-like 10 apoptosis facilitator) is a pro-apoptotic member of the Bcl-2 protein family. Diva contains conserved BH4, BH1 and BH2 domains and can interact with other members of the Bcl-2 protein family, including Bcl-2, BCL2L1/Bcl-x<sub>L</sub> and Bax. Bcl-2 family members form hetero- or homodimers and act as anti- or pro-apoptotic regulators that influence a variety of cellular activities. Overexpression of Diva may suppress apoptosis through the prevention of cytochrome C release from the mitochondria. The mouse homolog of Diva interacts with apoptosis activating factor-1 (Apaf-1) and forms a protein complex with caspase-9. In glioma cells, Diva interferes with apoptotic signaling downstream of cytochrome c release, but upstream of caspase activation, consistent with an inhibitory effect on the mitochondrial amplification step involving the apoptosome and Apaf-1.

## REFERENCES

1. Kiefer, M.C., et al. 1995. Modulation of apoptosis by the widely distributed Bcl-2 homologue Bak. *Nature* 374: 736-739.
2. Xu, Q., et al. 1998. Bax inhibitor-1, a mammalian apoptosis suppressor identified by functional screening in yeast. *Mol. Cell* 1: 337-346.
3. Inohara, N., et al. 1998. Diva, a Bcl-2 homologue that binds directly to Apaf-1 and induces BH3-independent cell death. *J. Biol. Chem.* 273: 32479-32486.
4. Naumann, U., et al. 2001. Diva/Boo is a negative regulator of cell death in human glioma cells. *FEBS Lett.* 505: 23-26.
5. Lee, R., et al. 2001. Characterization of NR13-related human cell death regulator, Boo/Divia, in normal and cancer tissues. *Biochim. Biophys. Acta* 1520: 187-194.
6. Auouacheria, A., et al. 2001. Nrh, a human homologue of Nr-13 associates with Bcl-X<sub>s</sub> and is an inhibitor of apoptosis. *Oncogene* 20:5846-5855.
7. Russell, H.R., et al. 2002. Murine ovarian development is not affected by inactivation of the Bcl-2 family member Diva. *Mol. Cell. Biol.* 22: 6866-6870.

## CHROMOSOMAL LOCATION

Genetic locus: Bcl2l10 (mouse) mapping to 9 D.

## SOURCE

Diva (A-18) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the N-terminus of Diva of mouse 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-8739 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## RESEARCH USE

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

## APPLICATIONS

Diva (A-18) is recommended for detection of Diva of mouse and rat origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], 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).

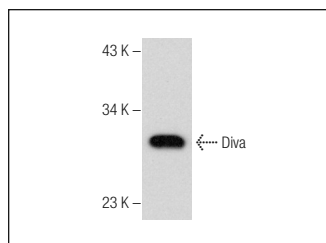
Suitable for use as control antibody for Diva siRNA (m): sc-37302, Diva shRNA Plasmid (m): sc-37302-SH and Diva shRNA (m) Lentiviral Particles: sc-37302-V.

Positive Controls: IB4 whole cell lysate: sc-364780.

## 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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) 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.

## DATA



Diva (A-18): sc-8739. Western blot analysis of Diva expression in IB4 whole cell lysate.

## STORAGE

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

## PROTOCOLS

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