

# survivin (FL-142): sc-10811

## BACKGROUND

The baculovirus protein p35 inhibits virally-induced apoptosis of invertebrate and mammalian cells and may function to impair the clearing of virally infected cells by the host's immune system. This is accomplished at least in part by its ability to block both TNF- and FAS-mediated apoptosis through the inhibition of the ICE family of serine proteases. Two mammalian homologs of baculovirus p35, referred to as inhibitor of apoptosis protein (IAP) 1 and 2, share an amino-terminal baculovirus IAP repeat (BIR) motif and a carboxy-terminal RING finger. Although the c-IAPs do not directly associate with the TNF receptor (TNF-R), they efficiently block TNF-mediated apoptosis through their interaction with the downstream TNF-R effectors, TRAF1 and TRAF2. Additional IAP family members include ILP (for IAP-like protein) and survivin. ILP inhibits activated caspase-3, leading to the resistance of FAS-mediated apoptosis. Survivin (also designated TIAP) is expressed during the G<sub>2</sub>/M phase of the cell cycle and associates with microtubules of the mitotic spindle. Increased caspase-3 activity is detected when a disruption of survivin-microtubule interactions occurs.

## CHROMOSOMAL LOCATION

Genetic locus: BIRC5 (human) mapping to 17q25.3; Birc5 (mouse) mapping to 11 E2.

## SOURCE

survivin (FL-142) is a rabbit polyclonal antibody raised against amino acids 1-142 of survivin 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.

## APPLICATIONS

survivin (FL-142) is recommended for detection of survivin of mouse, rat and human 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), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

survivin (FL-142) is also recommended for detection of survivin in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for survivin siRNA (h): sc-29499, survivin siRNA (m): sc-29500, survivin shRNA Plasmid (h): sc-29499-SH, survivin shRNA Plasmid (m): sc-29500-SH, survivin shRNA (h) Lentiviral Particles: sc-29499-V and survivin shRNA (m) Lentiviral Particles: sc-29500-V.

Molecular Weight of survivin: 17 kDa.

Positive Controls: survivin (m): 293T Lysate: sc-126065, COLO 320DM cell lysate: sc-2226 or HL-60 whole cell lysate: sc-2209.

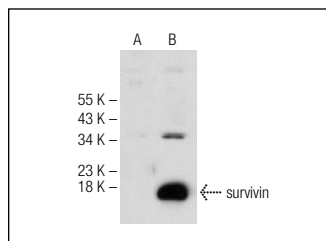
## RESEARCH USE

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

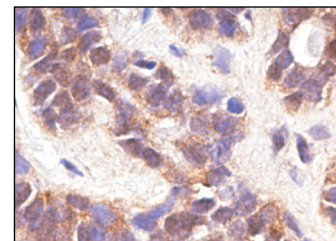
## STORAGE

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

## DATA



survivin (FL-142): sc-10811. Western blot analysis of survivin expression in non-transfected: sc-117752 (A) and mouse survivin transfected: sc-126065 (B) 293T whole cell lysates.



survivin (FL-142): sc-10811. Immunoperoxidase staining of formalin-fixed, paraffin-embedded human breast tumor showing cytoplasmic staining.

## SELECT PRODUCT CITATIONS

- Gigoux, V., et al. 2002. Identification of Aurora kinases as RasGAP Src homology 3 domain-binding proteins. *J. Biol. Chem.* 277: 23742-23746.
- Palka-Hamblin, H.L., et al. 2010. Identification of  $\beta$ -catenin as a target of the intracellular tyrosine kinase PTK6. *J. Cell Sci.* 123: 236-245.
- Cavazos, D.A., et al. 2011. Docosahexaenoic acid selectively induces human prostate cancer cell sensitivity to oxidative stress through modulation of NF $\kappa$ B. *Prostate* 71: 1420-1428.
- Kaeffer, B., et al. 2011. Non-invasive exploration of neonatal gastric epithelium by using exfoliated epithelial cells. *PLoS ONE* 6: e25562.
- Liao, M.H., et al. 2011. *Tithonia diversifolia* and its main active component tagitinin C induce survivin inhibition and G<sub>2</sub>/M arrest in human malignant glioblastoma cells. *Fitoterapia* 82: 331-341.
- Li, L., et al. 2011. SIRT1 acts as a modulator of neointima formation following vascular injury in mice. *Circ. Res.* 108: 1180-1189.
- Papanikolaou, V., et al. 2011. Survivin regulation by HER2 through NF $\kappa$ B and c-myc in irradiated breast cancer cells. *J. Cell. Mol. Med.* 15: 1542-1550.
- Palianopoulou, M., et al. 2011. The activation of leptin-mediated survivin is limited by the inducible suppressor SOCS-3 in MCF-7 cells. *Exp. Biol. Med.* 236: 70-76.
- Rodriguez-Garcia, A., et al. 2013. Phenotypic changes caused by melatonin increased sensitivity of prostate cancer cells to cytokine-induced apoptosis. *J. Pineal Res.* 54: 33-45.



Try **survivin (D-8): sc-17779** or **survivin (C-6): sc-374616**, our highly recommended monoclonal alternatives to survivin (FL-142). Also, for AC, HRP, FITC, PE, Alexa Fluor<sup>®</sup> 488 and Alexa Fluor<sup>®</sup> 647 conjugates, see **survivin (D-8): sc-17779**.