

survivin (2H5H2): sc-101433

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 immune system of the host. This is accomplished at least in part by the ability of p35 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 G₂/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 (2H5H2) is a mouse monoclonal antibody raised against recombinant full length survivin of human origin.

PRODUCT

Each vial contains 200 µg IgG₁ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

survivin (2H5H2) 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)] and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

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: rat heart extract: sc-2393, HL-60 whole cell lysate: sc-2209 or mouse spleen extract: sc-2391.

RESEARCH USE

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

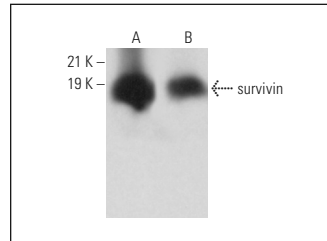
PROTOCOLS

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

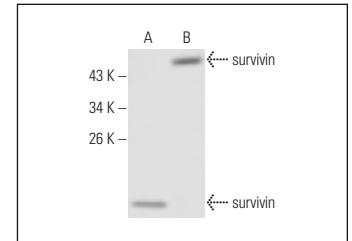
STORAGE

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

DATA



survivin (2H5H2): sc-101433. Western blot analysis of survivin expression in mouse spleen (A) and rat heart (B) tissue extracts.



survivin (2H5H2): sc-101433. Western blot analysis of human recombinant survivin protein (A) and survivin expression in survivin-GFP transfected COS-7 cells (B).

SELECT PRODUCT CITATIONS

- Zhao, X., et al. 2017. Physapubescin B inhibits tumorigenesis and circumvents taxol resistance of ovarian cancer cells through Stat3 signaling. *Oncotarget* 8: 70130-70141.
- Xiong, J., et al. 2018. Antibody-nanoparticle conjugate constructed with trastuzumab and nanoparticle albumin-bound paclitaxel for targeted therapy of human epidermal growth factor receptor 2-positive gastric cancer. *Oncol. Rep.* 39: 1396-1404.
- Qian, L. and Zhu, Y. 2018. Computer-aided drug design and inhibitive effect of a novel nitrogenous heterocyclic compound and its mechanism on glioma U251 cells and breast cancer MCF-7 cells. *Drug Des. Dev. Ther.* 12: 1931-1939.
- Meng, L., et al. 2018. Survivin is critically involved in VEGFR2 signaling-mediated esophageal cancer cell survival. *Biomed. Pharmacother.* 107: 139-145.
- Li, J., et al. 2018. Effects and mechanism of Stat3 silencing on the growth and apoptosis of colorectal cancer cells. *Oncol. Lett.* 16: 5575-5582.
- Guo, G., et al. 2019. Nano hydroxyapatite induces glioma cell apoptosis by suppressing NFκB signaling pathway. *Exp. Ther. Med.* 17: 4080-4088.
- Yan, T., et al. 2019. Carboxamide derivatives induce apoptosis in the U251 glioma cell line. *Oncol. Lett.* 18: 1409-1414.
- Ahmad, R., et al. 2019. Induction of ROS-mediated cell death and activation of the JNK pathway by a sulfonamide derivative. *Int. J. Mol. Med.* 44: 1552-1562.
- Cui, Y., et al. 2021. miRNA-193a-3p regulates the AKT2 pathway to inhibit the growth and promote the apoptosis of glioma cells by targeting ALKBH5. *Front. Oncol.* 11: 600451.



See **survivin (D-8): sc-17779** for survivin antibody conjugates, including AC, HRP, FITC, PE, and Alexa Fluor® 488, 546, 594, 647, 680 and 790.