SANTA CRUZ BIOTECHNOLOGY, INC.

c-IAP2 (F-20): sc-1957

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

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. Three mammalian homologs of baculovirus p35, designated MIHA (mammalian IAP homolog A), MIHB and MIHC have been described. These three mammalian inhibitor of apoptosis proteins (IAPs) are designated XIAP, c-IAP1 and c-IAP2, respectively. XIAP, c-IAP1 and c-IAP2 share an N-terminal baculovirus IAP repeat (BIR) motif and a C-terminal RING finger. Although c-IAP1 and c-IAP2 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. The interaction between the TRAF1/TRAF2 heterocomplexes and c-IAPs is dependent on a functional BIR motif.

CHROMOSOMAL LOCATION

Genetic locus: BIRC3 (human) mapping to 11q22.2.

SOURCE

c-IAP2 (F-20) is available as either goat (sc-1957) or rabbit (sc-1957-R) purified antibody raised against a peptide mapping N-terminus (h) of c-IAP2 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-1957 P, (100 µg peptide in 0.5 ml PBS containing 1 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

c-IAP2 (F-20) is recommended for detection of c-IAP2 of 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).

c-IAP2 (F-20) is also recommended for detection of c-IAP2 in additional species, including equine and bovine.

Suitable for use as control antibody for c-IAP2 siRNA (h): sc-29850, c-IAP2 shRNA Plasmid (h): sc-29850-SH and c-IAP2 shRNA (h) Lentiviral Particles: sc-29850-V.

Molecular Weight of c-IAP2: 68 kDa.

Positive Controls: c-IAP2 (h): 293T Lysate: sc-115716, U-937 cell lysate: sc-2239 or HeLa whole cell lysate: sc-2200.

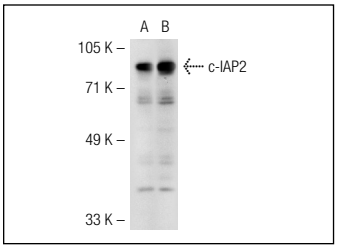
RESEARCH USE

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

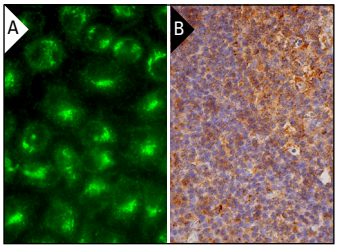
STORAGE

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

DATA



c-IAP2 (F-20)-R: sc-1957-R. Western blot analysis of c-IAP2 expression in non-transfected: sc-117752 (**A**) and human c-IAP2 transfected: sc-115716 (**B**) 293T whole cell lysates.



c-IAP2 (F-20)-R: sc-1957-R. Immunofluorescence staining of methanol-fixed HeLa cells showing cytoplasmic localization (**A**). Immunoperoxidase staining of formalin fixed, paraffin-embedded human tonsil tissue showing cytoplasmic staining of cells in germinal and non-germinal centers (**B**).

SELECT PRODUCT CITATIONS

1. Fiumara, P., et al. 2001. Functional expression of receptor activator of nuclear factor κB in Hodgkin disease cell lines. Blood 98: 2784-2790.
2. Werneburg, B.G., et al. 2001. Molecular characterization of CD40 signaling intermediates. J. Biol. Chem. 276: 43334-43342.
3. Marienfeld, C., et al. 2004. Translational regulation of XIAP expression and cell survival during hypoxia in human cholangiocarcinoma. Gastroenterology 127: 1787-1797.
4. Jurewicz, A., et al. 2005. Tumour necrosis factor-induced death of adult human oligodendrocytes is mediated by apoptosis inducing factor. Brain 128: 2675-2688.
5. Ramachandran, S., et al. 2006. Improved islet yields from pancreas preserved in perflurocarbon is via inhibition of apoptosis mediated by mitochondrial pathway. Am. J. Transplant. 6: 1696-1703.
6. Sasaki, H., et al. 2007. A novel selective progesterone receptor modulator asoprisnil activates tumor necrosis factor-related apoptosis-inducing ligand (TRAIL)-mediated signaling pathway in cultured human uterine leiomyoma cells in the absence of comparable effects on myometrial cells. J. Clin. Endocrinol. Metab. 92: 616-623.
7. Drago-Ferrante, R., et al. 2008. Low doses of paclitaxel potently induce apoptosis in human retinoblastoma Y79 cells by up-regulating E2F1. Int. J. Oncol. 33: 677-687.
8. Amendola, D., et al. 2009. Myc down-regulation affects cyclin D1/Cdk4 activity and induces apoptosis via Smac/Diablo pathway in an astrocytoma cell line. Cell Prolif. 42: 94-109.

PROTOCOLS

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