

# c-IAP1 (H-83): sc-7943

## 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, respectively, have been described. The two proteins 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. The interaction between the TRAF1/TRAF2 heterocomplexes and c-IAPs is dependent on a functional BIR motif.

## CHROMOSOMAL LOCATION

Genetic locus: BIRC2 (human) mapping to 11q22.2.

## SOURCE

c-IAP1 (H-83) is a rabbit polyclonal antibody raised against amino acids 111-193 mapping within an internal region of c-IAP1 (inhibitor of apoptosis protein 1) 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

c-IAP1 (H-83) is recommended for detection of c-IAP1 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).

Suitable for use as control antibody for c-IAP1 siRNA (h): sc-29848, c-IAP1 shRNA Plasmid (h): sc-29848-SH and c-IAP1 shRNA (h) Lentiviral Particles: sc-29848-V.

Molecular Weight of c-IAP1: 70 kDa.

Positive Controls: Jurkat whole cell lysate: sc-2204 or MOLT-4 cell lysate: sc-2233.

## STORAGE

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

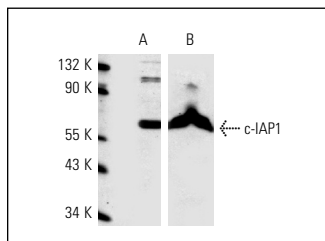
## PROTOCOLS

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

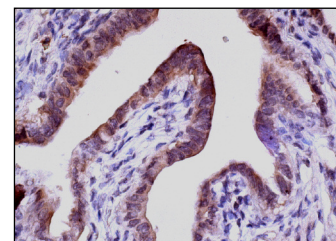
## RESEARCH USE

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

## DATA



c-IAP1 (H-83): sc-7943. Western blot analysis of c-IAP1 expression in Jurkat (A) and MOLT-4 (B) whole cell lysates.



c-IAP1 (H-83): sc-7943. Immunoperoxidase staining of formalin fixed, paraffin-embedded human ovary tissue showing nuclear and cytoplasmic staining of cells in fallopian tubes.

## SELECT PRODUCT CITATIONS

- Kreuz, S., et al. 2001. NFκB inducers upregulate cFLIP, a cycloheximide-sensitive inhibitor of death receptor signaling. *Mol. Cell. Biol.* 21: 3964-3973.
- Manderscheid, M., et al. 2001. Regulation of inhibitor of apoptosis expression by nitric oxide and cytokines: relation to apoptosis induction in rat mesangial cells and raw 264.7 macrophages. *J. Am. Soc. Nephrol.* 12: 1151-1163.
- Braun, F.K., et al. 2010. Resistance of cutaneous anaplastic large-cell lymphoma cells to apoptosis by death ligands is enhanced by CD30-mediated overexpression of c-FLIP. *J. Invest. Dermatol.* 130: 826-840.
- Kunnumakkara, A.B., et al. 2010. γ-tocotrienol inhibits pancreatic tumors and sensitizes them to gemcitabine treatment by modulating the inflammatory microenvironment. *Cancer Res.* 70: 8695-8705.
- Liu, F., et al. 2011. TNFα cooperates with IFN-γ to repress Bcl-x<sub>L</sub> expression to sensitize metastatic colon carcinoma cells to TRAIL-mediated apoptosis. *PLoS ONE* 6: e16241.
- Gupta, S.C., et al. 2011. Nimbolide sensitizes human colon cancer cells to TRAIL through reactive oxygen species- and ERK-dependent up-regulation of death receptors, p53, and Bax. *J. Biol. Chem.* 286: 1134-1146.
- Ramachandiran, S., et al. 2012. The Smac mimetic RMT5265.2HCL induces apoptosis in EBV and HTLV-I associated lymphoma cells by inhibiting XIAP and promoting the mitochondrial release of cytochrome C and Smac. *Leuk. Res.* 36: 784-790.
- Gui, J., et al. 2013. Dynamic change of TNIK in response to tumor necrosis factor α in a TRAF2-dependent manner. *Hum. Cell* 26: 67-72.



Try **c-IAP1 (F-4): sc-271419**, our highly recommended monoclonal alternative to c-IAP1 (H-83).