

c-IAP1 (N-19): sc-1867

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.

REFERENCES

- Hay, B.A., et al. 1994. Expression of baculovirus p35 prevents cell death in *Drosophila*. *Development* 120: 2121-2129.
- Clem, R.J., et al. 1994. Control of programmed cell death by the baculovirus genes p35 and IAP. *Mol. Cell. Biol.* 14: 5212-5222.
- Beidler, D.R., et al. 1995. The baculovirus p35 protein inhibits Fas- and tumor necrosis factor-induced apoptosis. *J. Biol. Chem.* 270: 16526-16528.

CHROMOSOMAL LOCATION

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

SOURCE

c-IAP1 (N-19) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the N-terminus of c-IAP1 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-1867 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

c-IAP1 (N-19) is recommended for detection of c-IAP1 of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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 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.

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) 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.

SELECT PRODUCT CITATIONS

- Werneburg, B.G., et al. 2001. Molecular characterization of CD40 signaling intermediates. *J. Biol. Chem.* 276: 43334-43342.
- Kuai, J., et al. 2003. Endogenous association of TRAF2, TRAF3, cIAP1, and Smac with lymphotoxin receptor reveals a novel mechanism of apoptosis. *J. Biol. Chem.* 278: 14363-14369.
- Marienfeld, C., et al. 2004. Translational regulation of XIAP expression and cell survival during hypoxia in human cholangiocarcinoma. *Gastroenterology* 127: 1787-1797.
- Poppelmann, B., et al. 2005. NFκB-dependent down-regulation of tumor necrosis factor receptor-associated proteins contributes to interleukin-1-mediated enhancement of ultraviolet B-induced apoptosis. *J. Biol. Chem.* 280: 15635-15643.
- Hung, H.S., et al. 2007. Association of cooking oil fumes exposure with lung cancer: involvement of inhibitor of apoptosis proteins in cell survival and proliferation *in vitro*. *Mutat. Res.* 628: 107-116.
- Orzechowska, S., et al. 2011. Cholesterol level determines viability and mitogenicity, but it does not affect sodium butyrate-dependent sensitization of Colo 205 cells to TNF-α-induced apoptosis. *Oncol. Rep.* 25: 573-582.
- Kastamoulas, M., et al. 2013. Cytokine effects on cell survival and death of A549 lung carcinoma cells. *Cytokine* 61: 816-825.

STORAGE

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

RESEARCH USE

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


 MONOS
Satisfaction
Guaranteed

Try **c-IAP1 (F-4): sc-271419**, our highly recommended monoclonal alternative to c-IAP1 (N-19).