

c-IAP1/2 (A-13): sc-12410

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.

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.

CHROMOSOMAL LOCATION

Genetic locus: BIRC2/BIRC3 (human) mapping to 11q22.2; Birc2/Birc3 (mouse) mapping to 9 A1.

SOURCE

c-IAP1/2 (A-13) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of c-IAP1/2 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-12410 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

c-IAP1/2 (A-13) is recommended for detection of c-IAP1 and c-IAP2 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) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

c-IAP1/2 (A-13) is also recommended for detection of c-IAP1 and c-IAP2 in additional species, including equine, canine, bovine, porcine and avian.

Molecular Weight of c-IAP1: 70 kDa.

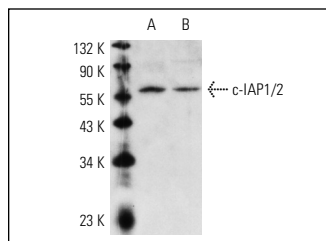
Molecular Weight of c-IAP2: 68 kDa.

Positive Controls: mouse testis extract: sc-2405, rat testis extract: sc-2400 or Jurkat whole cell lysate: sc-2204.

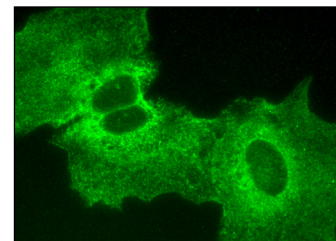
STORAGE

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

DATA



c-IAP1/2 (A-13): sc-12410. Western blot analysis of c-IAP1/2 expression in mouse (A) and rat (B) testis extract.



c-IAP1/2 (A-13): sc-12410. Immunofluorescence staining of formalin-fixed Hep G2 cells showing cytoplasmic localization.

SELECT PRODUCT CITATIONS

- He, Y.Y., et al. 2004. Expression profiling of human keratinocyte response to ultraviolet A: implications in apoptosis. *J. Invest. Dermatol.* 122: 533-543.
- Bernal-Mizrachi, L., et al. 2006. The role of NF-B-1 and NF-B-2-mediated resistance to apoptosis in lymphomas. *Proc. Natl. Acad. Sci. USA* 103: 9220-9225.
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RESEARCH USE

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