

c-IAP Antibody

c-IAP (CT): inhibitor of apoptosis protein, HIAP

CATALOG NO.: 3325

BACKGROUND:

Apoptosis, or programmed cell death, is related to many diseases, such as cancer. Apoptosis is triggered by a variety of stimuli including members in the TNF family and can be prevented by the inhibitor of apoptosis (IAP) proteins. IAP proteins form a conserved gene family that binds to and inhibits cell death proteases (1 for review). The two isoforms of c-IAP (c-IAP1 and c-IAP2) are structurally related to XIAP, containing 3 baculoviral IAP repeat (BIR) motifs that are essential and sufficient for the binding and inhibition of caspases-3, -7, (2,3). The c-IAPs can associate with the death receptor TNF-R2, and mediate the ubiquitination of TRAF2 following the binding of TNF- α by its receptor (2,4). Omi, a negative regulator of c-IAP, inhibits its activity by catalytically cleaving c-IAP (5). Another negative regulator, Smac/DIABLO, acts by enhancing the auto-ubiquitination activity of c-IAP (6).

SOURCE:

Rabbit polyclonal c-IAP antibody was raised against a synthetic peptide corresponding to 14 amino acids at the C-terminus of human c-IAP1 (Genbank accession No. NP_001157). c-IAP antibody detects both c-IAP1 and c-IAP2.

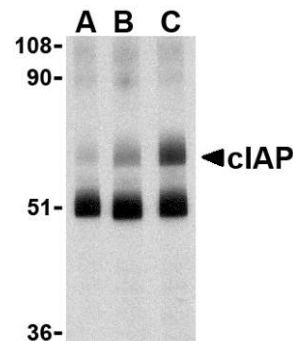
APPLICATION:

c-IAP antibody can be used for the detection of c-IAP by Western blot at 1 to 2 μ g/ml. (Optimal dilution should be determined by user.) Human lung cell lysate can be used as positive control. c-IAP antibody is human and mouse reactive.

For research use only.

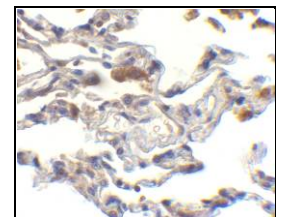
STORAGE:

c-IAP antibody is supplied as immunoaffinity purified IgG in PBS containing 0.02% sodium azide. Store at 4°C, stable for one year.



Western blot analysis of c-IAP in human lung lysate with c-IAP antibody (CT) at 1 (lane A), 2 (lane B), and 4 (lane C) μ g/ml, respectively.

Immunohistochemistry of cIAP in human lung cells with cIAP antibody at 10 μ g/ml.



RELATED PRODUCTS:

Blocking peptide, Catalog No. **3325P**.
Human Lung Lysate, Catalog No. **1302**.
Smac/DIABLO Antibody (CT), Catalog No. **2409**.
Omi Antibody (IN), Catalog No. **3319**.
XIAP Antibody (CT), Catalog No. **3331**.

REFERENCES:

- Schimmer AD. Inhibitor of apoptosis proteins: translating basic knowledge into clinical practice. *Cancer Res.* 2004; 64:7183-90.
- Rothe M, Pan M-G, Henzel WJ, et al. The TNFR2-TRAF signaling complex contains two novel proteins related to baculoviral inhibitor of apoptosis proteins. *Cell* 1995; 83:1243-52.
- Deveraux QL, Leo E, Stennicke HR, et al. IAPs block apoptotic events induced by caspase-8 and cytochrome c by direct inhibition of distinct caspases. *EMBO J.* 1998; 17:2215-23.
- Li X, Yang Y, Ashwell JD. TNF-RII and c-IAP1 mediate ubiquitination and degradation of TRAF 2. *Nature* 2002; 416:345-7.
- Yang Q-H, Church-Hajduk R, Ren J, et al. Omi/HtrA2 catalytic cleavage of inhibitor of apoptosis (IAP) irreversibly inactivates IAPs and facilitates caspase activity in apoptosis. *Genes Dev.* 2003; 17:1487-96.
- Yang Q-H and Du C. Smac/DIABLO selectively reduces the levels of c-IAP1 and c-IAP2 but not that of XIAP and Livin in HeLa cells. *J. Biol. Chem.* 2004; 279:16963-70. (RD0306)