

# **ML-IAP Polyclonal Antibody**

Catalog # AP70965

## **Product Information**

Application WB
Primary Accession Q96CA5
Reactivity Human
Host Rabbit
Clonality Polyclonal
Calculated MW 32798

## **Additional Information**

**Gene ID** 79444

Other Names BIRC7; KIAP; LIVIN; MLIAP; RNF50; Baculoviral IAP repeat-containing protein

7; Kidney inhibitor of apoptosis protein; KIAP; Livin; Melanoma inhibitor of

apoptosis protein; ML-IAP; RING finger protein 50

Dilution WB~~Western Blot: 1/500 - 1/2000. ELISA: 1/10000. Not yet tested in other

applications.

Format Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium

azide.

Storage Conditions -20°C

### **Protein Information**

Name BIRC7

Synonyms KIAP, LIVIN, MLIAP, RNF50

**Function** Apoptotic regulator capable of exerting proapoptotic and anti-apoptotic

activities and plays crucial roles in apoptosis, cell proliferation, and cell cycle

control (PubMed: 11024045, PubMed: 11084335, PubMed: 11162435,

PubMed:<u>16729033</u>, PubMed:<u>17294084</u>). Its anti-apoptotic activity is mediated through the inhibition of CASP3, CASP7 and CASP9, as well as by its E3 ubiquitin-protein ligase activity (PubMed:<u>11024045</u>, PubMed:<u>16729033</u>). As it is a weak caspase inhibitor, its anti-apoptotic activity is thought to be due to its ability to ubiquitinate DIABLO/SMAC targeting it for degradation thereby promoting cell survival (PubMed:<u>16729033</u>). May contribute to caspase

inhibition, by blocking the ability of DIABLO/SMAC to disrupt

XIAP/BIRC4-caspase interactions (PubMed:<u>16729033</u>). Protects against apoptosis induced by TNF or by chemical agents such as adriamycin, etoposide or staurosporine (PubMed:<u>11084335</u>, PubMed:<u>11162435</u>, PubMed:<u>11865055</u>). Suppression of apoptosis is mediated by activation of

MAPK8/JNK1, and possibly also of MAPK9/JNK2 (PubMed: 11865055). This activation depends on TAB1 and MAP3K7/TAK1 (PubMed: 11865055). In vitro, inhibits CASP3 and proteolytic activation of pro-CASP9 (PubMed: 11024045).

#### **Cellular Location**

Nucleus. Cytoplasm. Golgi apparatus. Note=Nuclear, and in a filamentous pattern throughout the cytoplasm. Full-length livin is detected exclusively in the cytoplasm, whereas the truncated form (tLivin) is found in the peri-nuclear region with marked localization to the Golgi apparatus; the accumulation of tLivin in the nucleus shows positive correlation with the increase in apoptosis

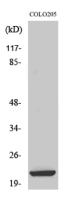
#### **Tissue Location**

Isoform 1 and isoform 2 are expressed at very low levels or not detectable in most adult tissues. Detected in adult heart, placenta, lung, lymph node, spleen and ovary, and in several carcinoma cell lines. Isoform 2 is detected in fetal kidney, heart and spleen, and at lower levels in adult brain, skeletal muscle and peripheral blood leukocytes

# **Background**

Apoptotic regulator capable of exerting proapoptotic and anti-apoptotic activities and plays crucial roles in apoptosis, cell proliferation, and cell cycle control. Its anti-apoptotic activity is mediated through the inhibition of CASP3, CASP7 and CASP9, as well as by its E3 ubiquitin-protein ligase activity. As it is a weak caspase inhibitor, its anti-apoptotic activity is thought to be due to its ability to ubiquitinate DIABLO/SMAC targeting it for degradation thereby promoting cell survival. May contribute to caspase inhibition, by blocking the ability of DIABLO/SMAC to disrupt XIAP/BIRC4-caspase interactions. Protects against apoptosis induced by TNF or by chemical agents such as adriamycin, etoposide or staurosporine. Suppression of apoptosis is mediated by activation of MAPK8/JNK1, and possibly also of MAPK9/JNK2. This activation depends on TAB1 and NR2C2/TAK1. In vitro, inhibits CASP3 and proteolytic activation of pro-CASP9. Isoform 1 blocks staurosporine-induced apoptosis. Isoform 2 blocks etoposide-induced apoptosis. Isoform 2 protects against natural killer (NK) cell killing whereas isoform 1 augments killing.

# **Images**



Western Blot analysis of various cells using ML-IAP Polyclonal Antibody

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.