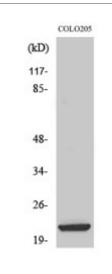


Anti-ML-IAP antibody



Description Rabbit polyclonal to ML-IAP.

Model STJ94147

Host Rabbit

Reactivity Human

Applications ELISA, WB

Immunogen Synthesized peptide derived from human ML-IAP.

Immunogen Region Internal

Gene ID <u>79444</u>

Gene Symbol BIRC7

Dilution range WB 1:500-1:2000ELISA 1:10000

Specificity ML-IAP Polyclonal Antibody detects endogenous levels of ML-IAP protein.

Tissue Specificity 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.

Purification The antibody was affinity-purified from rabbit antiserum by affinity-

chromatography using epitope-specific immunogen.

Note For Research Use Only (RUO).

Protein Name Baculoviral IAP repeat-containing protein 7 Kidney inhibitor of apoptosis

protein KIAP Livin Melanoma inhibitor of apoptosis protein ML-IAP RING

finger protein 50 RING-type E3 ubiquitin transferase BIRC7 Bac

Molecular Weight 21 kDa

Polyclonal **Clonality**

Unconjugated Conjugation

IgG Isotype

Formulation Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.

Concentration 1 mg/ml

Store at -20°C, and avoid repeat freeze-thaw cycles. **Storage Instruction**

Database Links HGNC:13702OMIM:605737

Baculoviral IAP repeat-containing protein 7 Kidney inhibitor of apoptosis **Alternative Names**

protein KIAP Livin Melanoma inhibitor of apoptosis protein ML-IAP RING

finger protein 50 RING-type E3 ubiquitin transferase BIRC7 Bac

Function 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.

Sequence and Domain Family The RING domain is essential for autoubiquitination.

Nucleus Cytoplasm Golgi apparatus. Nuclear, and in a filamentous pattern **Cellular Localization**

> 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.

Post-translational **Modifications**

Autoubiquitinated and undergoes proteasome-mediated degradation.; The truncated protein (tLivin) not only loses its anti-apoptotic effect but also

acquires a pro-apoptotic effect.

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