

Livin Antibody

Rabbit Polyclonal Antibody Catalog # ABV10247

Specification

Livin Antibody - Product Information

Application
Primary Accession
Reactivity
Host
Clonality
Isotype
Calculated MW

WB, IHC
Q96CA5
Human
Rabbit
Polyclonal
Rabbit IgG
32798

Livin Antibody - Additional Information

Gene ID 79444

Application & Usage

Western blotting (2-6 μ g/ml). However, the optimal dilution conditions should be determined individually. The antibody detects a band at ~33 kDa and a weaker band at 30 kDa, corresponding to Livin α and β . Raji cell lysate can be used as a positive control.

Other Names

BIRC7, LIVIN, ML-IAP, MLIAP, KIAP, RNF50, Livin

Target/Specificity

Livin

Antibody Form

Liquid

Appearance

Colorless liquid

Formulation

 $100 \mu g$ (0.5 mg/ml) peptide affinity purified rabbit anti-Livin polyclonal antibody in phosphate buffered saline (PBS), pH 7.2, containing 30% glycerol, 0.5% BSA, 0.01% thimerosal.

Handling

The antibody solution should be gently mixed before use.

Reconstitution & Storage

-20 °C

Background Descriptions



Precautions

Livin Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Livin Antibody - 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:11162435, PubMed:11024045, PubMed:11084335, PubMed:16729033, PubMed:17294084). 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:11024045, PubMed:16729033). 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: 16729033). May contribute to caspase inhibition, by blocking the ability of DIABLO/SMAC to disrupt XIAP/BIRC4-caspase interactions (PubMed: 16729033). Protects against apoptosis induced by TNF or by chemical agents such as adriamycin, etoposide or staurosporine (PubMed: 11162435, PubMed:11084335, PubMed:11865055). 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

Livin Antibody - Protocols





Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- <u>Immunofluorescence</u>
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Livin Antibody - Images

Livin Antibody - Background

Livin is a novel member in the IAP (inhibitor of apoptosis) protein family. Livin contains a single baculoviral IAP repeat (BIR) domain and a RING finger domain and has two isoforms termed Livin- α and Livin- β . Transfection of Livin protected cells from apoptosis induced by FADD, BAX, RIP, RIP3 and DR6. Livin directly reacts with several caspases including Caspase-3, -7, and -9, and it inhibits the activation of caspase-9 induced by Apaf-1, cytochrome c and ATP.