

[16729033](http://www.uniprot.org/citations/16729033), PubMed: [17294084](http://www.uniprot.org/citations/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](http://www.uniprot.org/citations/11024045), PubMed: [16729033](http://www.uniprot.org/citations/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](http://www.uniprot.org/citations/16729033)). May contribute to caspase inhibition, by blocking the ability of DIABLO/SMAC to disrupt XIAP/BIRC4-caspase interactions (PubMed: [16729033](http://www.uniprot.org/citations/16729033)). Protects against apoptosis induced by TNF or by chemical agents such as adriamycin, etoposide or staurosporine (PubMed: [11084335](http://www.uniprot.org/citations/11084335), PubMed: [11162435](http://www.uniprot.org/citations/11162435), PubMed: [11865055](http://www.uniprot.org/citations/11865055)). Suppression of apoptosis is mediated by activation of MAPK8/JNK1, and possibly also of MAPK9/JNK2 (PubMed: [11865055](http://www.uniprot.org/citations/11865055)). This activation depends on TAB1 and MAP3K7/TAK1 (PubMed: [11865055](http://www.uniprot.org/citations/11865055)). In vitro, inhibits CASP3 and proteolytic activation of pro-CASP9 (PubMed: [11024045](http://www.uniprot.org/citations/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

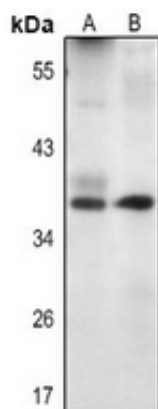
Anti-Livin Antibody - Protocols

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

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

Anti-Livin Antibody - Images





Western blot analysis of Livin expression in A549 (A), mouse lung (B) whole cell lysates.

Anti-Livin Antibody - Background

KLH-conjugated synthetic peptide encompassing a sequence within the center region of human Livin. The exact sequence is proprietary.