

# **Anti-Livin Antibody**

**Catalog # ABO12759** 

# Specification

# **Anti-Livin Antibody - Product Information**

Application WB, E
Primary Accession Q96CA5
Host Rabbit
Reactivity Human
Clonality Polyclonal
Format Lyophilized

**Description** 

Rabbit IgG polyclonal antibody for Baculoviral IAP repeat-containing protein 7(BIRC7) detection. Tested with WB, ELISA in Human.<br/>

#### Reconstitution

Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

# **Anti-Livin Antibody - Additional Information**

#### **Gene ID** 79444

#### **Other Names**

Baculoviral IAP repeat-containing protein 7, 2.3.2.27, Kidney inhibitor of apoptosis protein, KIAP, Livin, Melanoma inhibitor of apoptosis protein, ML-IAP, RING finger protein 50, RING-type E3 ubiquitin transferase BIRC7, Baculoviral IAP repeat-containing protein 7 30kDa subunit, Truncated livin, p30-Livin, tLivin, BIRC7, KIAP, LIVIN, MLIAP, RNF50

## Calculated MW 32798 MW KDa

#### **Application Details**

Western blot, 0.1-0.5 μg/ml, Human, -<br/>-<br/>ELISA , 0.1-0.5 μg/ml, Human<br/>-

### **Subcellular Localization**

Nucleus . Cytoplasm . Golgi apparatus . 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 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.

### **Protein Name**

Baculoviral IAP repeat-containing protein 7



#### **Contents**

Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg NaN3.

# **Immunogen**

E. coli-derived human Livin recombinant protein (Position: E87-S298). Human Livin shares 69.8% amino acid (aa) sequence identity with mouse Livin.

#### **Purification**

Immunogen affinity purified.

# **Cross Reactivity**

No cross reactivity with other proteins

Storage

At -20°C for one year. After r°Constitution, at 4°C for one month. It°Can also be aliquotted and stored frozen at -20°C for a longer time. Avoid repeated freezing and thawing.

**Sequence Similarities**Belongs to the IAP family.

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



#### **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**

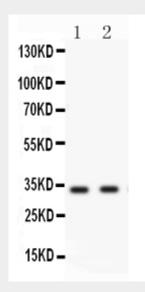
Isoform 1 and isoform 2 are expressed at very low levels or not detectable in most adult tissues. Detected in adult heart, placenta, lung, lymph node, spleen and ovary, and in several carcinoma cell lines. Isoform 2 is detected in fetal kidney, heart and spleen, and at lower levels in adult brain, skeletal 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
- <u>Immunohistochemistry</u>
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

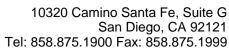
### **Anti-Livin Antibody - Images**



Anti- Livin antibody, ABO12759, Western blottingAll lanes: Anti Livin (ABO12759) at 0.5ug/mlLane 1: HELA Whole Cell Lysate at 40ugLane 2: A431 Whole Cell Lysate at 40ugPredicted bind size: 33KDObserved bind size: 33KD

# **Anti-Livin Antibody - Background**

Baculoviral IAP repeat-containing protein 7 is a protein that in humans is encoded by the BIRC7 gene. This protein is a member of the family of inhibitor of apoptosis proteins (IAP) and contains a single copy of a baculovirus IAP repeat (BIR) and a RING finger motif. Its gene is mapped to 20q13.3. It has got 280- and 298- amino acids. The protein is highly expressed in melanomas while





lowly expressed in some lymphomas, fetal kidney, fetal liver, testis and thymus. BIRC7 plays a vital role in blocking apoptosis induced.