

#### cIAP-1/HIAP-2 Antibody

Rabbit Polyclonal Antibody Catalog # ABV10147

#### **Specification**

#### cIAP-1/HIAP-2 Antibody - Product Information

Application WB
Primary Accession 013490

Reactivity Human, Mouse, Rat

Host Rabbit
Clonality Polyclonal
Isotype Rabbit IgG
Calculated MW 69900

### cIAP-1/HIAP-2 Antibody - Additional Information

Gene ID 329

Positive Control Western Blot: Jurkat cell lysate. IHC:

**Kidney tissue** 

Application & Usage Western blot analysis (0.5-4 μg/ml), and

Immunohistochemistry (5 μg/ml). However,

the optimal conditions should be

determined individually. Jurkat cell lysate and rat kidney tissue lysate can be used as

positive controls.

**Other Names** 

API1, cIAP1, C-IAP1, HIAP-2, HIAP2, RNF48, MIHB, IAP2, BIRC2

Target/Specificity cIAP-1/HIAP-2

**Antibody Form** 

Liquid

**Appearance** Colorless liquid

## **Formulation**

 $100~\mu g$  (0.2 mg/ml) affinity purified rabbit anti-cIAP-1 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**

cIAP-1/HIAP-2 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

### cIAP-1/HIAP-2 Antibody - Protein Information

Name BIRC2

Synonyms API1, MIHB, RNF48

#### **Function**

Multi-functional protein which regulates not only caspases and apoptosis, but also modulates inflammatory signaling and immunity, mitogenic kinase signaling, and cell proliferation, as well as cell invasion and metastasis. Acts as an E3 ubiquitin-protein ligase regulating NF-kappa-B signaling and regulates both canonical and non- canonical NF-kappa-B signaling by acting in opposite directions: acts as a positive regulator of the canonical pathway and suppresses constitutive activation of non-canonical NF-kappa-B signaling. The target proteins for its E3 ubiquitin-protein ligase activity include: RIPK1, RIPK2, RIPK3, RIPK4, CASP3, CASP7, CASP8, TRAF2, DIABLO/SMAC, MAP3K14/NIK, MAP3K5/ASK1, IKBKG/NEMO, IKBKE and MXD1/MAD1. Can also function as an E3 ubiquitin-protein ligase of the NEDD8 conjugation pathway, targeting effector caspases for neddylation and inactivation. Acts as an important regulator of innate immune signaling via regulation of Toll-like receptors (TLRs), Nodlike receptors (NLRs) and RIG-I like receptors (RLRs), collectively referred to as pattern recognition receptors (PRRs). Protects cells from spontaneous formation of the ripoptosome, a large multi-protein complex that has the capability to kill cancer cells in a caspase-dependent and caspase- independent manner. Suppresses ripoptosome formation by ubiquitinating RIPK1 and CASP8. Can stimulate the transcriptional activity of E2F1. Plays a role in the modulation of the cell cycle.

#### **Cellular Location**

Cytoplasm. Nucleus. Note=Agents that induce either the extrinsic or intrinsic apoptotic pathways promote its redistribution from the nuclear compartment to the cytoplasmic compartment. Associated with the midbody in telophase cells, and found diffusely in the nucleus of interphase cells

#### **Tissue Location**

Present in many fetal and adult tissues. Mainly expressed in adult skeletal muscle, thymus, testis, ovary, and pancreas, low or absent in brain and peripheral blood leukocytes

### cIAP-1/HIAP-2 Antibody - Protocols

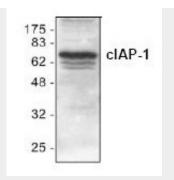
Provided below are standard protocols that you may find useful for product applications.

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

#### cIAP-1/HIAP-2 Antibody - Images







Western blot analysis of cIAP-1 in Jurkat cell lysate.

# cIAP-1/HIAP-2 Antibody - Background

Apoptosis can be inhibited by a group of proteins called inhibitors of apoptosis (IAPs). These proteins contain a BIR (baculovirus IAP repeat) domain near the amino-terminus. The BIR domain can bind some caspases. Many members of the IAP family of proteins block proteolytic activation of caspase-3 and -7. For example, XIAP, cIAP-1 and cIAP-2 appear to block cytochrome c-induced activation of caspase-9, thereby preventing initiation of the caspase cascade. Since cIAP-1 and cIAP-2 were first identified as components in the cytosolic death domain-induced complex associated with the TNF family of receptors, they may inhibit apoptosis by additional mechanisms.