

Anti-XIAP Picoband Antibody

Catalog # ABO12650

#### Specification

#### **Anti-XIAP Picoband Antibody - Product Information**

ApplicationWBPrimary AccessionP98170HostRabbitReactivityHuman, Mouse, RatClonalityPolyclonalFormatLyophilizedDescriptionRabbit IgG polyclonal antibody for E3 ubiquitin-protein ligase XIAP(XIAP) detection. Tested with WB in Human:Mouse:Rat.

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

### Anti-XIAP Picoband Antibody - Additional Information

Gene ID 331

**Other Names** 

E3 ubiquitin-protein ligase XIAP, 2.3.2.27, Baculoviral IAP repeat-containing protein 4, IAP-like protein, ILP, hILP, Inhibitor of apoptosis protein 3, IAP-3, hIAP-3, hIAP3, RING-type E3 ubiquitin transferase XIAP, X-linked inhibitor of apoptosis protein, X-linked IAP, XIAP, API3, BIRC4, IAP3

Calculated MW 56685 MW KDa

**Application Details** Western blot, 0.1-0.5 μg/ml, Human, Mouse, Rat<br>

**Subcellular Localization** Cytoplasm. Nucleus. TLE3 promotes its nuclear localization.

**Tissue Specificity** Ubiquitous, except peripheral blood leukocytes.

Protein Name E3 ubiquitin-protein ligase XIAP

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

Immunogen

E.coli-derived human XIAP recombinant protein (Position: A15-V244). Human XIAP shares 89.4% and 90.7% amino acid (aa) sequence identity with mouse and rat XIAP, respectively.



**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.

## Anti-XIAP Picoband Antibody - Protein Information

Name XIAP {ECO:0000303|PubMed:12121969, ECO:0000312|HGNC:HGNC:592}

Function

Multi-functional protein which regulates not only caspases and apoptosis, but also modulates inflammatory signaling and immunity, copper homeostasis, mitogenic kinase signaling, cell proliferation, as well as cell invasion and metastasis (PubMed: <a href="http://www.uniprot.org/citations/11257230" target="\_blank">11257230</a>, PubMed:<a href="http://www.uniprot.org/citations/11257231" target="\_blank">11257231</a>, PubMed:<a href="http://www.uniprot.org/citations/11447297" target=" blank">11447297</a>, PubMed:<a href="http://www.uniprot.org/citations/12121969" target=" blank">12121969</a>, PubMed:<a href="http://www.uniprot.org/citations/12620238" target=" blank">12620238</a>, PubMed:<a href="http://www.uniprot.org/citations/17560374" target=" blank">17560374</a>, PubMed:<a href="http://www.uniprot.org/citations/17967870" target=" blank">17967870</a>, PubMed:<a href="http://www.uniprot.org/citations/19473982" target="\_blank">19473982</a>, PubMed:<a href="http://www.uniprot.org/citations/20154138" target="\_blank">20154138</a>, PubMed:<a href="http://www.uniprot.org/citations/22103349" target=" blank">22103349</a>, PubMed:<a href="http://www.uniprot.org/citations/9230442" target=" blank">9230442</a>). Acts as a direct caspase inhibitor (PubMed:<a href="http://www.uniprot.org/citations/11257230" target=" blank">11257230</a>, PubMed:<a href="http://www.uniprot.org/citations/11257231" target=" blank">11257231</a>, PubMed:<a href="http://www.uniprot.org/citations/12620238" target=" blank">12620238</a>). Directly bind to the active site pocket of CASP3 and CASP7 and obstructs substrate entry (PubMed:<a href="http://www.uniprot.org/citations/11257230" target="\_blank">11257230</a>, PubMed:<a href="http://www.uniprot.org/citations/11257231" target=" blank">11257231</a>, PubMed:<a href="http://www.uniprot.org/citations/16352606" target=" blank">16352606</a>, PubMed:<a href="http://www.uniprot.org/citations/16916640" target=" blank">16916640</a>). Inactivates CASP9 by keeping it in a monomeric, inactive state (PubMed:<a href="http://www.uniprot.org/citations/12620238" target=" blank">12620238</a>). Acts as an E3 ubiguitin-protein ligase regulating NF-kappa-B signaling and the target proteins for its E3 ubiguitin- protein ligase activity include: RIPK1, RIPK2, MAP3K2/MEKK2, DIABLO/SMAC, AIFM1, CCS, PTEN and BIRC5/survivin (PubMed:<a href="http://www.uniprot.org/citations/17560374" target=" blank">17560374</a>, PubMed:<a href="http://www.uniprot.org/citations/17967870" target=" blank">17967870</a>, PubMed:<a href="http://www.uniprot.org/citations/19473982" target=" blank">19473982</a>, PubMed:<a href="http://www.uniprot.org/citations/20154138" target=" blank">20154138</a>, PubMed:<a href="http://www.uniprot.org/citations/22103349" target=" blank">22103349</a>, PubMed:<a href="http://www.uniprot.org/citations/22607974" target="\_blank">22607974</a>, PubMed:<a href="http://www.uniprot.org/citations/29452636" target="\_blank">29452636</a>, PubMed:<a href="http://www.uniprot.org/citations/30026309" target=" blank">30026309</a>). Acts as an important regulator of innate immunity by mediating 'Lys-63'-linked polyubiguitination of RIPK2 downstream of NOD1 and NOD2, thereby transforming RIPK2 into a scaffolding protein for downstream effectors, ultimately leading to activation of the NF-kappa-B and MAP kinases signaling (PubMed: <a href="http://www.uniprot.org/citations/19667203"



target="\_blank">19667203</a>, PubMed:<a href="http://www.uniprot.org/citations/22607974" target="\_blank">22607974</a>, PubMed:<a href="http://www.uniprot.org/citations/29452636" target="\_blank">29452636</a>, PubMed:<a href="http://www.uniprot.org/citations/30026309" target="\_blank">30026309</a>). 'Lys-63'-linked polyubiquitination of RIPK2 also promotes recruitment of the LUBAC complex to RIPK2 (PubMed:<a

href="http://www.uniprot.org/citations/22607974" target=" blank">22607974</a>, PubMed:<a href="http://www.uniprot.org/citations/29452636" target=" blank">29452636</a>). Regulates the BMP signaling pathway and the SMAD and MAP3K7/TAK1 dependent pathways leading to NF-kappa-B and JNK activation (PubMed: <a href="http://www.uniprot.org/citations/17560374" target=" blank">17560374</a>). Ubiquitination of CCS leads to enhancement of its chaperone activity toward its physiologic target, SOD1, rather than proteasomal degradation (PubMed:<a href="http://www.uniprot.org/citations/20154138" target=" blank">20154138</a>). Ubiguitination of MAP3K2/MEKK2 and AIFM1 does not lead to proteasomal degradation (PubMed:<a href="http://www.uniprot.org/citations/17967870" target=" blank">17967870</a>, PubMed:<a href="http://www.uniprot.org/citations/22103349" target="\_blank">22103349</a>). Plays a role in copper homeostasis by ubiguitinating COMMD1 and promoting its proteasomal degradation (PubMed:<a href="http://www.uniprot.org/citations/14685266" target=" blank">14685266</a>). Can also function as E3 ubiquitin-protein ligase of the NEDD8 conjugation pathway, targeting effector caspases for neddylation and inactivation (PubMed:<a href="http://www.uniprot.org/citations/21145488" target=" blank">21145488</a>). Ubiquitinates and therefore mediates the proteasomal degradation of BCL2 in response to apoptosis (PubMed:<a href="http://www.uniprot.org/citations/29020630" target=" blank">29020630</a>). 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 (PubMed:<a href="http://www.uniprot.org/citations/22095281" target=" blank">22095281</a>). Suppresses ripoptosome formation by ubiquitinating RIPK1 and CASP8 (PubMed: <a href="http://www.uniprot.org/citations/22095281" target=" blank">22095281</a>). Acts as a positive regulator of Wnt signaling and ubiguitinates TLE1, TLE2, TLE3, TLE4 and AES (PubMed:<a href="http://www.uniprot.org/citations/22304967" target=" blank">22304967</a>). Ubiquitination of TLE3 results in inhibition of its interaction with TCF7L2/TCF4 thereby allowing efficient recruitment and binding of the transcriptional coactivator beta-catenin to TCF7L2/TCF4 that is required to initiate a Wnt-specific transcriptional program (PubMed:<a href="http://www.uniprot.org/citations/22304967" target=" blank">22304967</a>).

#### **Cellular Location**

Cytoplasm. Nucleus. Note=TLE3 promotes its nuclear localization.

#### **Tissue Location**

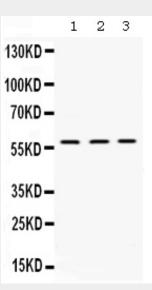
Expressed in colonic crypts (at protein level) (PubMed:30389919). Ubiquitous, except peripheral blood leukocytes (PubMed:8654366).

#### Anti-XIAP Picoband Antibody - Protocols

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

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

**Anti-XIAP Picoband Antibody - Images** 



Western blot analysis of XIAP expression in rat kidney extract (lane 1), mouse liver extract (lane 2) and HELA whole cell lysates (lane 3). XIAP at 57KD was detected using rabbit anti-XIAP Antigen Affinity purified polyclonal antibody (Catalog # ABO12650) at 0.5 ??g/mL. The blot was developed using chemiluminescence (ECL) method .

# Anti-XIAP Picoband Antibody - Background

XIAP, also known as IAP3 or BIRC4, is a protein that stops apoptotic cell death. It is mapped to chromosome Xq25. This gene encodes a protein that belongs to a family of apoptotic suppressor proteins. Members of this family share a conserved motif termed, baculovirus IAP repeat, which is necessary for their anti-apoptotic function. This protein functions through binding to tumor necrosis factor receptor-associated factors TRAF1 and TRAF2 and inhibits apoptosis induced by menadione, a potent inducer of free radicals, and interleukin 1-beta converting enzyme. This protein also inhibits at least two members of the caspase family of cell-death proteases, caspase-3 and caspase-7. Mutations in this gene are the cause of X-linked lymphoproliferative syndrome. Alternate splicing results in multiple transcript variants.