

**KD-Validated Anti-XIAP Mouse Monoclonal Antibody**  
**Mouse monoclonal antibody**  
**Catalog # AGI2004**

## Specification

**KD-Validated Anti-XIAP Mouse Monoclonal Antibody - Product Information**

|                   |  |
|-------------------|--|
| Application       | WB   |
| Primary Accession | <a href="#">P98170</a>   |
| Reactivity        | Human  |
| Clonality         | Monoclonal   |
| Isotype           | Mouse IgG1,k   |
| Calculated MW     | Predicted, 57 kDa, observed, 49 kDa KDa  |
| Gene Name         | XIAP   |
| Aliases           | XIAP; X-Linked Inhibitor Of Apoptosis;<br>BIRC4; HILP; API3; X-Linked Inhibitor Of<br>Apoptosis, E3 Ubiquitin Protein Ligase;<br>Baculoviral IAP Repeat-Containing Protein<br>4; RING-Type E3 Ubiquitin Transferase<br>XIAP; E3 Ubiquitin-Protein Ligase XIAP;<br>Inhibitor Of Apoptosis Protein 3; IAP-Like<br>Protein 1; X-Linked IAP; HIAP-3; ILP-1;<br>IAP-3; HIAP3; X-Linked Inhibitor Of<br>Apoptosis Protein; Baculoviral IAP<br>Repeat-Containing 4; IAP-Like Protein; EC<br>2.3.2.27; ILP1; MIHA; XLP2; IAP3; ILP<br>Recombinant human XIAP |
| Immunogen         |  |

#### **KD-Validated Anti-XIAP Mouse Monoclonal 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  
{ECO:0000303|PubMed:12121969, ECO:0000312|HGNC:HGNC:592}

## KD-Validated Anti-XIAP Mouse Monoclonal Antibody - Protein Information

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

## Function

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 ubiquitin-protein ligase regulating NF-kappa-B signaling and the target proteins for its E3 ubiquitin-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 polyubiquitination 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>). Ubiquitination 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 ubiquitinating 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 ubiquitinates 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

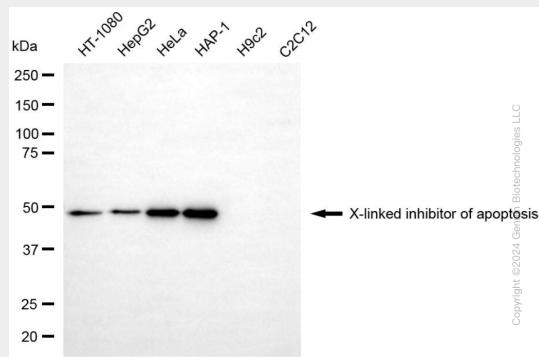
Expressed in colonic crypts (at protein level) (PubMed:30389919). Ubiquitous, except peripheral blood leukocytes (PubMed:8654366).

### KD-Validated Anti-XIAP Mouse Monoclonal Antibody - Protocols

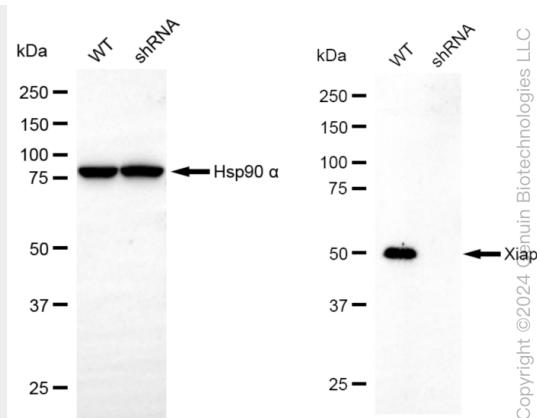
Provided below are standard protocols that you may find useful for product applications.

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

### KD-Validated Anti-XIAP Mouse Monoclonal Antibody - Images



Western blotting analysis using anti-X-linked inhibitor of apoptosis antibody (Cat#AGI2004). Total cell lysates (30 µg) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with anti-X-linked inhibitor of apoptosis antibody (Cat#AGI2004, 1:5,000) and HRP-conjugated goat anti-mouse secondary antibody respectively.



Western blotting analysis using anti-X-linked inhibitor of apoptosis antibody (Cat#AGI2004). X-linked inhibitor of apoptosis expression in wild-type (WT) and X-linked inhibitor of apoptosis (XIAP) shRNA knockdown (KD) HT-1080 cells with 20 µg of total cell lysates. Hsp90 α serves as a loading control. The blot was incubated with anti-X-linked inhibitor of apoptosis antibody (Cat#AGI2004, 1:5,000) and HRP-conjugated goat anti-mouse secondary antibody respectively.