10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

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	P98170
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; BIRC4; HILP; API3; X-Linked Inhibitor Of Apoptosis, E3 Ubiquitin Protein Ligase; Baculoviral IAP Repeat-Containing Protein 4; RING-Type E3 Ubiquitin Transferase XIAP; E3 Ubiquitin-Protein Ligase XIAP; Inhibitor Of Apoptosis Protein 3; IAP-Like Protein 1; X-Linked IAP; HIAP-3; ILP-1; IAP-3; HIAP3; X-Linked Inhibitor Of Apoptosis Protein; Baculoviral IAP Repeat-Containing 4; IAP-Like Protein; EC 2.3.2.27; ILP1; MIHA; XLP2; IAP3; ILP**
Immunogen	**Recombinant human XIAP**

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
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:11257230, PubMed:11257231, PubMed:11447297, PubMed:12121969, PubMed:<a

href="http://www.uniprot.org/citations/12620238" target="_blank">12620238, PubMed:17560374, PubMed:17967870, PubMed:19473982, PubMed:20154138, PubMed:22103349, PubMed:9230442). Acts as a direct caspase inhibitor (PubMed:11257230, PubMed:11257231, PubMed:12620238). Directly bind to the active site pocket of CASP3 and CASP7 and obstructs substrate entry (PubMed:11257230, PubMed:11257231, PubMed:16352606, PubMed:16916640). Inactivates CASP9 by keeping it in a monomeric, inactive state (PubMed:12620238). 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:17560374, PubMed:17967870, PubMed:19473982, PubMed:20154138, PubMed:22103349, PubMed:22607974, PubMed:29452636, PubMed:30026309). 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:19667203, PubMed:22607974, PubMed:29452636, PubMed:30026309). 'Lys-63'-linked polyubiquitination of RIPK2 also promotes recruitment of the LUBAC complex to RIPK2 (PubMed:22607974, PubMed:29452636). Regulates the BMP signaling pathway and the SMAD and MAP3K7/TAK1 dependent pathways leading to NF-kappa-B and JNK activation (PubMed:17560374). Ubiquitination of CCS leads to enhancement of its chaperone activity toward its physiologic target, SOD1, rather than proteasomal degradation (PubMed:20154138). Ubiquitination of MAP3K2/MEKK2 and AIFM1 does not lead to proteasomal degradation (PubMed:17967870, PubMed:22103349). Plays a role in copper homeostasis by ubiquitinating COMMD1 and promoting its proteasomal degradation (PubMed:14685266). Can also function as E3 ubiquitin-protein ligase of the NEDD8 conjugation pathway, targeting effector caspases for neddylation and inactivation (PubMed:21145488). Ubiquitinates and therefore mediates the proteasomal degradation of BCL2 in response to apoptosis (PubMed:29020630). 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:22095281).

Suppresses ripoptosome formation by ubiquitinating RIPK1 and CASP8 (PubMed:22095281). Acts as a positive regulator of Wnt signaling and ubiquitinates TLE1, TLE2, TLE3, TLE4 and AES (PubMed:22304967). 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:22304967).

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

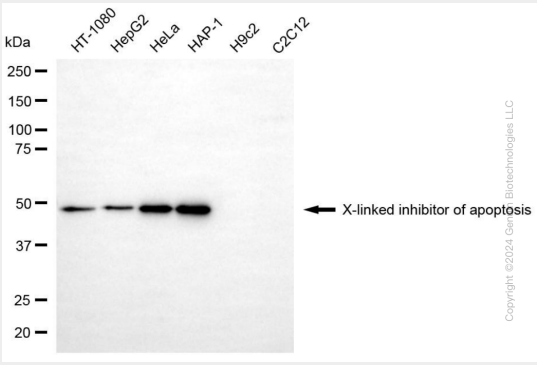
Tissue Location
Expressed in colonic crypts (at protein level) (PubMed:30389919). Ubiquitous, except peripheral blood leukocytes (PubMed:8654366).

KD-Validated Anti-XIAP Mouse Monoclonal Antibody - Protocols

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

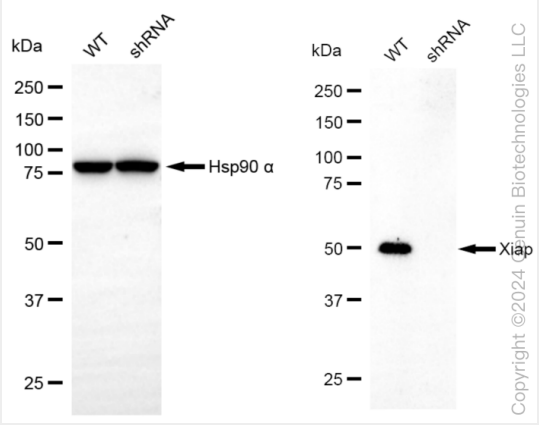
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

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.

10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999



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.