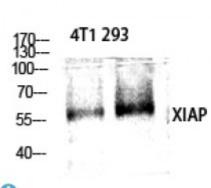


Anti-XIAP antibody





Model STJ96278

Host Rabbit

Reactivity Human, Mouse, Rat

Applications ELISA, IHC, WB

Immunogen Synthesized peptide derived from human XIAP around the non-

phosphorylation site of S87.

Immunogen Region 30-110 aa

Gene ID <u>331</u>

Gene Symbol XIAP

Dilution range WB 1:500-1:2000IHC 1:100-1:300ELISA 1:20000

Specificity XIAP Polyclonal Antibody detects endogenous levels of XIAP protein.

Tissue Specificity Ubiquitous, except peripheral blood leukocytes.

Purification The antibody was affinity-purified from rabbit antiserum by affinity-

chromatography using epitope-specific immunogen.

Note For Research Use Only (RUO).

Protein Name E3 ubiquitin-protein ligase XIAP 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

Molecular Weight 56 kDa

Clonality Polyclonal

Conjugation Unconjugated

Isotype IgG

Formulation Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.

Concentration 1 mg/ml

Storage Instruction Store at -20°C, and avoid repeat freeze-thaw cycles.

Database Links HGNC:5920MIM:300079

Alternative Names E3 ubiquitin-protein ligase XIAP 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

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. Acts as a direct caspase inhibitor. Directly bind to the active site pocket of CASP3 and CASP7 and obstructs substrate entry. Inactivates CASP9 by keeping it in a monomeric, inactive state. 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, CASP3, CASP7, CASP8,

CASP9, MAP3K2/MEKK2, DIABLO/SMAC, AIFM1, CCS and

BIRC5/survivin. Ubiquitinion of CCS leads to enhancement of its chaperone activity toward its physiologic target, SOD1, rather than proteasomal

degradation. Ubiquitinion of MAP3K2/MEKK2 and AIFM1 does not lead to

proteasomal degradation. Plays a role in copper homeostasis by

ubiquitinationg COMMD1 and promoting its proteasomal degradation. Can also function as E3 ubiquitin-protein ligase of the NEDD8 conjugation pathway, targeting effector caspases for neddylation and inactivation.

Regulates the BMP signaling pathway and the SMAD and MAP3K7/TAK1 dependent pathways leading to NF-kappa-B and JNK activation. Acts as an important regulator of innate immune signaling via regulation of Nodlike receptors (NLRs). 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. Acts as a positive regulator of Wnt signaling and ubiquitinates TLE1, TLE2, TLE3, TLE4 and AES. 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.

Sequence and Domain Family The first BIR domain is involved in interaction with TAB1/MAP3K7IP1 and

is important for dimerization. The second BIR domain is sufficient to inhibit CASP3 and CASP7, while the third BIR is involved in CASP9 inhibition. The interactions with DIABLO/SMAC and PRSS25 are mediated by the second

and third BIR domains.

Cellular Localization Cytoplasm. Nucleus. TLE3 promotes its nuclear localization.

Post-translational S-Nitrosylation down-regulates its E3 ubiquitin-protein ligase activity. **Modifications** Autoubiquitinated and degraded by the proteasome in apoptotic cells.

Phosphorylation by PKB/AKT protects XIAP against ubiquitination and

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