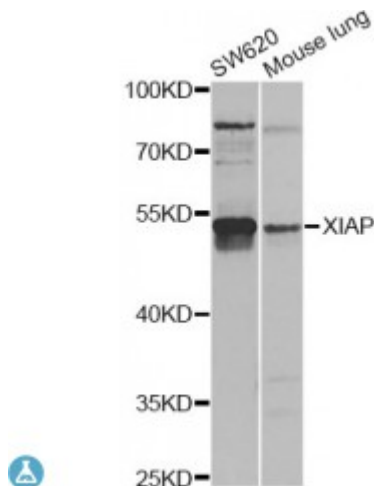


Anti-XIAP Antibody



Description

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. Pseudogenes of this gene are found on chromosomes 2 and 11.

Model	STJ115242
Host	Rabbit
Reactivity	Human, Mouse
Applications	IF, WB
Immunogen	Recombinant fusion protein containing a sequence corresponding to amino acids 1-200 of human XIAP (NP_001158.2).
Gene ID	331
Gene Symbol	XIAP
Dilution range	WB 1:500 - 1:2000 IF 1:50 - 1:200
Tissue Specificity	Ubiquitous, except peripheral blood leukocytes
Purification	Affinity purification

Note	For Research Use Only (RUO).
Protein Name	E3 ubiquitin-protein ligase XIAP
Molecular Weight	56.685 kDa
Clonality	Polyclonal
Conjugation	Unconjugated
Isotype	IgG
Formulation	PBS with 0.02% sodium azide, 50% glycerol, pH7.3.
Storage Instruction	Store at -20C. Avoid freeze / thaw cycles.
Database Links	HGNC:592OMIM:300079Reactome:R-HSA-111463
Alternative Names	E3 ubiquitin-protein ligase 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, Ubiquitination of CCS leads to enhancement of its chaperone activity toward its physiologic target, SOD1, rather than proteasomal degradation, Ubiquitination of MAP3K2/MEKK2 and AIFM1 does not lead to proteasomal degradation, Plays a role in copper homeostasis by ubiquitination of 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,
Cellular Localization	Cytoplasm, Nucleus,
Post-translational Modifications	S-Nitrosylation down-regulates its E3 ubiquitin-protein ligase activity,