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Anti-XIAP Antibody

Catalog # ABO10830

Product Information

Application	WB, IHC-P
Primary Accession	P98170
Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Format	Lyophilized
Description	Rabbit IgG polyclonal antibody for E3 ubiquitin-protein ligase XIAP(XIAP) detection. Tested with WB, IHC-P in Human;Mouse;Rat.
Reconstitution	Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

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
Application Details	Immunohistochemistry(Paraffin-embedded Section), 0.5-1 □g/ml, Human, By Heat Western blot, 0.1-0.5 □g/ml, Human, Rat, Mouse
Subcellular Localization	Cytoplasm. Nucleus. TLE3 promotes its nuclear localization.
Tissue Specificity	Ubiquitous, except peripheral blood leukocytes.
Source	Eukaryota
Protein Name	E3 ubiquitin-protein ligase XIAP
Contents	Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg Thimerosal, 0.05mg NaN3.
Immunogen	A synthetic peptide corresponding to a sequence at the N-terminus of human XIAP(14-34aa ADINKEEEFVEEFNRLKTFAN), different from the related mouse sequence by two amino acids.
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.
Sequence Similarities	Belongs to the IAP family.

Protein Information

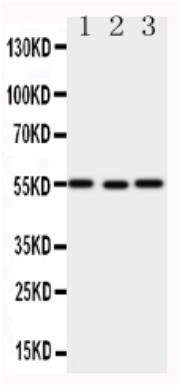
Name	XIAP {ECO:0000303|PubMed:12121969, ECO:0000312|HGNC:HGNC:592}
Function	Multi-functional protein which regulates not only caspases and apoptosis, but also modulates inflammatory signaling and immunity, copper homeostasis, mitogenic kinase signaling, cell proliferation, as well as cell invasion and metastasis (PubMed:11257230, PubMed:11257231, PubMed:11447297, PubMed:12121969, PubMed: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).

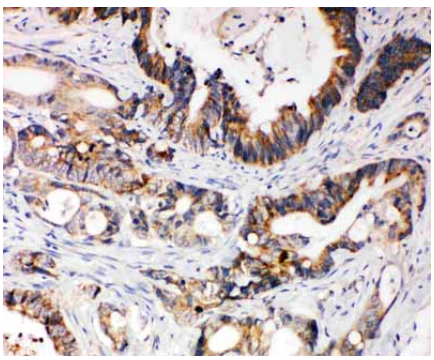
Background

BIRC4, baculoviral IAP repeat-containing protein 4 is also known as XIAP(X-linked inhibitor of apoptosis protein). The BIRC4 gene comprises 6 exons. This gene 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. Pseudogenes of this gene are found on chromosomes 2 and 11.

Images



Anti-XIAP antibody, ABO10830, Western blottingAll lanes: Anti XIAP (ABO10830) at 0.5ug/mlLane 1: SMMC Whole Cell Lysate at 40ugLane 2: HELA Whole Cell Lysate at 40ugLane 3: A431 Whole Cell Lysate at 40ugPredicted bind size: 55KDObserved bind size: 55KD



Anti-XIAP antibody, ABO10830, IHC(P)IHC(P): Human Intestinal Cancer Tissue

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.