

XIAP (E-2): sc-55551

BACKGROUND

The baculovirus protein p35 inhibits virally induced apoptosis of invertebrate and mammalian cells and may function to impair the clearing of virally infected cells by the immune system of the host. This is accomplished at least in part by its ability to block both TNF- and FAS-mediated apoptosis through the inhibition of the ICE family of serine proteases. Two mammalian homologs of baculovirus p35, referred to as inhibitor of apoptosis protein (IAP) 1 and 2, share an amino-terminal baculovirus IAP repeat (BIR) motif and a carboxy-terminal RING finger. Although the c-IAPs do not directly associate with the TNF receptor (TNF-R), they efficiently block TNF-mediated apoptosis through their interaction with the downstream TNF-R effectors, TRAF1 and TRAF2. Additional IAP family members include XIAP and survivin. XIAP inhibits activated caspase-3, leading to the resistance of FAS-mediated apoptosis. Survivin (also designated TIAP) is expressed during the G₂/M phase of the cell cycle and associates with microtubules of the mitotic spindle. Increased caspase-3 activity is detected when a disruption of survivin-microtubule interactions occurs.

CHROMOSOMAL LOCATION

Genetic locus: XIAP (human) mapping to Xq25; Xiap (mouse) mapping to X A4.

SOURCE

XIAP (E-2) is a mouse monoclonal antibody raised against amino acids 1-202 mapping at the N-terminus of XIAP (IAP-like protein) of human origin.

PRODUCT

Each vial contains 200 µg IgG_{2b} kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

XIAP (E-2) is available conjugated to agarose (sc-55551 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-55551 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-55551 PE), fluorescein (sc-55551 FITC), Alexa Fluor® 488 (sc-55551 AF488), Alexa Fluor® 546 (sc-55551 AF546), Alexa Fluor® 594 (sc-55551 AF594) or Alexa Fluor® 647 (sc-55551 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-55551 AF680) or Alexa Fluor® 790 (sc-55551 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

APPLICATIONS

XIAP (E-2) is recommended for detection of XIAP of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for XIAP siRNA (h): sc-37508, XIAP siRNA (m): sc-37509, XIAP shRNA Plasmid (h): sc-37508-SH, XIAP shRNA Plasmid (m): sc-37509-SH, XIAP shRNA (h) Lentiviral Particles: sc-37508-V and XIAP shRNA (m) Lentiviral Particles: sc-37509-V.

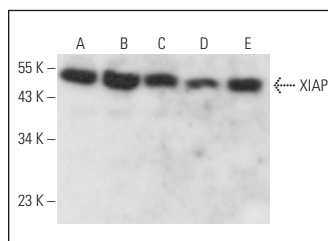
Molecular Weight of XIAP: 55 kDa.

Positive Controls: Jurkat whole cell lysate: sc-2204, RPE-J cell lysate: sc-24771 or PANC-1 whole cell lysate: sc-364380.

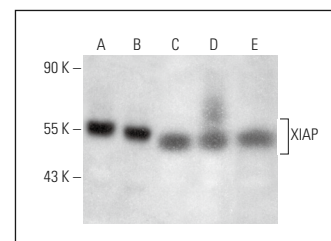
STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

DATA



XIAP (E-2): sc-55551. Western blot analysis of XIAP expression in A549 (A), NCI-H929 (B), BXP-3 (C), RAW 264.7 (D) and NIH/3T3 (E) whole cell lysates.



XIAP (E-2): sc-55551. Western blot analysis of XIAP expression in PANC-1 (A), Jurkat (B), NRK (C), 3T3-L1 (D) and RPE-J (E) whole cell lysates.

SELECT PRODUCT CITATIONS

- Chattopadhyay, S., et al. 2009. Tumor-shed PGE₂ impairs IL2R γ -signaling to inhibit CD4 T cell survival: regulation by theaflavins. *PLoS ONE* 4: e7382.
- Liu, J., et al. 2013. Berberine induces apoptosis in p53-null leukemia cells by down-regulating XIAP at the post-transcriptional level. *Cell. Physiol. Biochem.* 32: 1213-1224.
- Yang, W., et al. 2014. Distinctive effects of the cellular inhibitor of apoptosis protein c-IAP2 through stabilization by XIAP in glioblastoma multiforme cells. *Cell Cycle* 13: 992-1005.
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- Heider, T., et al. 2017. Radiation induced transcriptional and post-transcriptional regulation of the hsa-miR-23a~27a~24-2 cluster suppresses apoptosis by stabilizing XIAP. *Biochim. Biophys. Acta* 1860: 1127-1137.
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- Li, X., et al. 2019. miR-142-5p enhances cisplatin-induced apoptosis in ovarian cancer cells by targeting multiple anti-apoptotic genes. *Biochem. Pharmacol.* 161: 98-112.
- Seo, H.G., et al. 2020. Mutual regulation between OGT and XIAP to control colon cancer cell growth and invasion. *Cell Death Dis.* 11: 815.
- Steinle, H., et al. 2021. 14-3-3 and erlin proteins differentially interact with RIPK2 complexes. *J. Cell Sci.* 134: jcs258137.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

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