SANTA CRUZ BIOTECHNOLOGY, INC.

XIAP (A-7): sc-55550

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

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 G_2/M phase of the cell cycle and associates with microtublules 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 (A-7) 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_1 kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

XIAP (A-7) is available conjugated to agarose (sc-55550 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-55550 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-55550 PE), fluorescein (sc-55550 FITC), Alexa Fluor® 488 (sc-55550 AF488), Alexa Fluor® 546 (sc-55550 AF546), Alexa Fluor® 594 (sc-55550 AF594) or Alexa Fluor® 647 (sc-55550 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-55550 AF680) or Alexa Fluor® 790 (sc-55550 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

APPLICATIONS

XIAP (A-7) 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), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

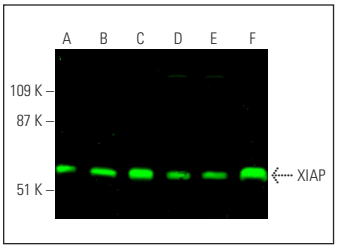
Suitable for use as control antibody for XIAP siRNA (h): sc-37508, XIAP siRNA (m): sc-37509, XIAP shRNA Plasmid (h): sc-37508-SH, XIAP shRNA Plasmid (m): sc-37509-SH, XIAP shRNA (h) Lentiviral Particles: sc-37508-V and XIAP shRNA (m) Lentiviral Particles: sc-37509-V.

Molecular Weight of XIAP: 55 kDa.

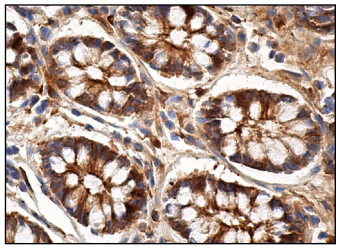
STORAGE

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

DATA



XIAP (A-7): sc-55550. Near-infrared western blot analysis of XIAP expression in HeLa (**A**), PANC-1 (**B**), Jurkat (**C**), KNRK (**D**), RPE-J (**E**) and A549 (**F**) whole cell lysates. Blocked with UltraCruz® Blocking Reagent: sc-516214. Detection reagent used: m-IgGκ BP-CFL 680: sc-516180.



XIAP (A-7): sc-55550. Immunoperoxidase staining of formalin fixed, paraffin-embedded human colon tissue showing cytoplasmic staining of glandular cells.

SELECT PRODUCT CITATIONS

1. Berges, C., et al. 2009. Proteasome inhibition activates the mitochondrial pathway of apoptosis in human $CD4^+$ T cells. J. Cell. Biochem. 108: 935-946.
2. Zhang, C., et al. 2013. Enhanced antitumor activity by the combination of dasatinib and combretastatin A-4 *in vitro* and *in vivo*. Oncol. Rep. 29: 2275-2282.
3. Sudha, T., et al. 2014. Suppression of pancreatic cancer by sulfated non-anticoagulant low molecular weight heparin. Cancer Lett. 350: 25-33.
4. Zhang, C., et al. 2016. Nedaplatin enhanced apoptotic effects of ABT-737 in human cancer cells via Mcl-1 inhibition. Oncol. Lett. 12: 4195-4202.
5. Chen, Y.J., et al. 2017. Novel histone deacetylase inhibitor AR-42 exhibits antitumor activity in pancreatic cancer cells by affecting multiple biochemical pathways. PLoS ONE 12: e0183368.
6. Xue, Y., et al. 2018. Downregulation of Frizzled-7 induces the apoptosis of hepatocellular carcinoma cells through inhibition of NFκB. Oncol. Lett. 15: 7693-7701.
7. Laudisi, F., et al. 2019. Progranulin sustains STAT3 hyper-activation and oncogenic function in colorectal cancer cells. Mol. Oncol. 13: 2142-2159.
8. Xiang, R.P., et al. 2020. Effects of different degrees of carotid artery stenosis on the expression of XIAP and Smac in the ischemic penumbra of rats with cerebral ischemia-reperfusion. J. Stroke Cerebrovasc. Dis. 30: 105516.
9. Peng, C., et al. 2021. Indole-3-carbinol ameliorates necroptosis and inflammation of intestinal epithelial cells in mice with ulcerative colitis by activating aryl hydrocarbon receptor. Exp. Cell Res. 404: 112638.

RESEARCH USE

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