

XIAP (D-2): sc-55552



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 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 (D-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.

APPLICATIONS

XIAP (D-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: RAW 264.7 whole cell lysate: sc-2211, A549 cell lysate: sc-2413 or NIH/3T3 whole cell lysate: sc-2210.

STORAGE

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

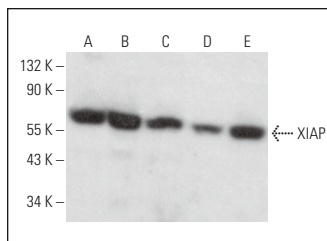
PROTOCOLS

See our web site at www.scbt.com for detailed protocols and support products.

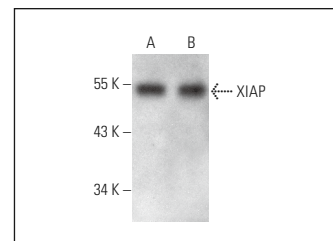
RESEARCH USE

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

DATA



XIAP (D-2): sc-55552. 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 (D-2): sc-55552. Western blot analysis of XIAP expression in PANC-1 (A) and Jurkat (B) whole cell lysates.

SELECT PRODUCT CITATIONS

- Chang, G.C., et al. 2008. An epidermal growth factor inhibitor, Gefitinib, induces apoptosis through a p53-dependent upregulation of pro-apoptotic molecules and downregulation of anti-apoptotic molecules in human lung adenocarcinoma A549 cells. *Eur. J. Pharmacol.* 600: 37-44.
- Yalcin, M., et al. 2013. Response of human pancreatic cancer cell xenografts to tetraiodothyroacetic acid nanoparticles. *Horm. Cancer* 4: 176-185.
- Ding, B., et al. 2015. Sestrin2 facilitates death receptor-induced apoptosis in lung adenocarcinoma cells through regulation of XIAP degradation. *Cell Cycle* 14: 3231-3241.
- Bai, X., et al. 2016. Effects of maslinic acid on the proliferation and apoptosis of A549 lung cancer cells. *Mol. Med. Rep.* 13: 117-122.
- Choi, J.H., et al. 2017. Anti-inflammatory effects of an ethanol extract of *Aster glehni* via inhibition of NFκB activation in mice with DSS-induced colitis. *Food Funct.* 8: 2611-2620.
- Chung, K.S., et al. 2018. Chemopreventive effect of *Aster glehni* on inflammation-induced colorectal carcinogenesis in mice. *Nutrients* 10: 202.
- Chen, X., et al. 2019. Targeting the deubiquitinase STAMBPL1 triggers apoptosis in prostate cancer cells by promoting XIAP degradation. *Cancer Lett.* 456: 49-58.
- Jin, B.R., et al. 2021. Rosmarinic acid represses colitis-associated colon cancer: a pivotal involvement of the TLR4-mediated NFκB-STAT3 axis. *Neoplasia* 23: 561-573.
- Jin, B.R., et al. 2021. Anti-obesity drug orlistat alleviates Western-diet-driven colitis-associated colon cancer via inhibition of STAT3 and NFκB-mediated signaling. *Cells* 10: 2060.



See **XIAP (A-7): sc-55550** for XIAP antibody conjugates, including AC, HRP, FITC, PE, and Alexa Fluor® 488, 546, 594, 647, 680 and 790.