SANTA CRUZ BIOTECHNOLOGY, INC.

XAF1 (H-4): sc-374378

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

X-linked inhibitor of apoptosis protein (XIAP)-associated factor 1 (XAF1) is a zinc finger protein that blocks the anti-apoptotic activity of XIAP. XIAP is a member of the family of intrinsic inhibitors of apoptosis proteins (IAPs), which suppress apoptosis through the inhibition of caspases. In the presence of XAF1, XIAP protein redistributes from the cytosol to the nucleus. XAF1 transcripts (3.9-, 4.5-, 6.0- and 7.0-kb) are present at high levels in heart and ovary. Low expression of XAF1 mRNA is an indicator for certain cancers (WM164 melanoma, WM35 melanoma, U937 pro-monocytic leukemia and HT1080 fibrosarcoma), suggesting that low levels of XAF1 transcript may enhance cancer cell-survival through the relative increase in XIAP anti-apoptotic function. IFN-α and IFN-β activate the human XAF1 gene, which maps to chromosome 17p13.1.

REFERENCES

1. Fong, W.G., et al. 2000. Expression and genetic analysis of XIAP-associated factor 1 (XAF1) in cancer cell lines. Genomics 70: 113-122.
2. Holcik, M., et al. 2001. XIAP: apoptotic brake and promising therapeutic target. Apoptosis 6: 253-261.
3. Liston, P., et al. 2001. Identification of XAF1 as an antagonist of XIAP anti-Caspase activity. Nat. Cell Biol. 3: 128-133.
4. Perrelet, D., et al. 2002. IAPs are essential for GDNF-mediated neuroprotective effects in injured motor neurons *in vivo*. Nat. Cell Biol. 4: 175-179.
5. Leaman, D.W., et al. 2002. Identification of X-linked inhibitor of apoptosis-associated factor-1 as an interferon-stimulated gene that augments TRAIL Apo2L-induced apoptosis. J. Biol. Chem. 277: 28504-28511.
6. Online Mendelian Inheritance in Man, OMIM™. 2002. Johns Hopkins University, Baltimore, MD. MIM Number: 606717. World Wide Web URL: http://www.ncbi.nlm.nih.gov/omim/

CHROMOSOMAL LOCATION

Genetic locus: XAF1 (human) mapping to 17p13.1.

SOURCE

XAF1 (H-4) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 127-163 within an internal region of XAF1 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.

Blocking peptide available for competition studies, sc-374378 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

STORAGE

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

APPLICATIONS

XAF1 (H-4) is recommended for detection of XAF1 of 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 XAF1 siRNA (h): sc-37511, XAF1 shRNA Plasmid (h): sc-37511-SH and XAF1 shRNA (h) Lentiviral Particles: sc-37511-V.

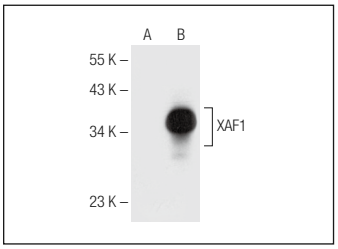
Molecular Weight of XAF1: 35 kDa.

Positive Controls: XAF1 (h): 293T Lysate: sc-111450.

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

DATA



XAF1 (H-4): sc-374378. Western blot analysis of XAF1 expression in non-transfected: sc-117752 (**A**) and human XAF1 transfected: sc-111450 (**B**) 293T whole cell lysates.

RESEARCH USE

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

PROTOCOLS

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