

# XAF1 (A-11): sc-374020

## 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- $\alpha$  and IFN- $\beta$  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.

## CHROMOSOMAL LOCATION

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

## SOURCE

XAF1 (A-11) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 242-275 near the C-terminus of XAF1 of human origin.

## PRODUCT

Each vial contains 200  $\mu$ g IgG $\gamma$  kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

XAF1 (A-11) is available conjugated to agarose (sc-374020 AC), 500  $\mu$ g/0.25 ml agarose in 1 ml, for IP; to HRP (sc-374020 HRP), 200  $\mu$ g/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-374020 PE), fluorescein (sc-374020 FITC), Alexa Fluor® 488 (sc-374020 AF488), Alexa Fluor® 546 (sc-374020 AF546), Alexa Fluor® 594 (sc-374020 AF594) or Alexa Fluor® 647 (sc-374020 AF647), 200  $\mu$ g/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-374020 AF680) or Alexa Fluor® 790 (sc-374020 AF790), 200  $\mu$ g/ml, for Near-Infrared (NIR) WB, IF and FCM.

Blocking peptide available for competition studies, sc-374020 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

Alexa Fluor® is a trademark of Molecular Probes, Inc., Oregon, USA

## STORAGE

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

## APPLICATIONS

XAF1 (A-11) 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  $\mu$ g per 100-500  $\mu$ g 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 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.

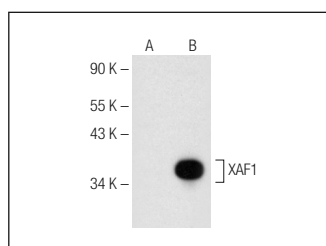
Positive Controls: XAF1 (h): 293T Lysate: sc-111450.

## RECOMMENDED SUPPORT REAGENTS

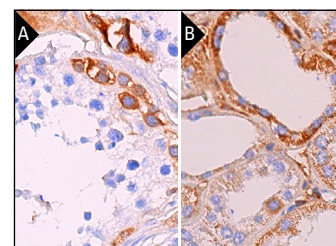
To ensure optimal results, the following support reagents are recommended:

- 1) Western Blotting: use m-IgG $\kappa$  BP-HRP: sc-516102 or m-IgG $\kappa$  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-IgG $\kappa$  BP-FITC: sc-516140 or m-IgG $\kappa$  BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.
- 4) Immunohistochemistry: use m-IgG $\kappa$  BP-HRP: sc-516102 with DAB, 50X: sc-24982 and Immunohistomount: sc-45086, or Organo/Limonene Mount: sc-45087.

## DATA



XAF1 (A-11): sc-374020. Western blot analysis of XAF1 expression in non-transfected: sc-117752 (A) and human XAF1 transfected: sc-111450 (B) 293T whole cell lysates.



XAF1 (A-11): sc-374020. Immunoperoxidase staining of formalin fixed, paraffin-embedded human testis tissue showing cytoplasmic staining of subset of cells in seminiferous ducts and Leydig cells (A). Immunoperoxidase staining of formalin fixed, paraffin-embedded human kidney tissue showing cytoplasmic staining of cells in tubules (B).

## SELECT PRODUCT CITATIONS

1. Reich, T.R., et al. 2017. Epigenetic silencing of XAF1 in high-grade gliomas is associated with IDH1 status and improved clinical outcome. *Oncotarget* 8: 15071-15084.

## RESEARCH USE

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