

XAF-1 Antibody
Catalog # ASC10274

Specification

XAF-1 Antibody - Product Information

Application	IF
Primary Accession	Q6GPH4
Other Accession	CAA68030 , 54739
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Application Notes	XAF-1 antibody can be used for the detection of XAF-1 by Western blot at 0.5 - 1 µg/mL. Multiple isoforms of XAF-1 exist and a doublet at ~30 kDa can be seen using anti-XAF-1 (IN). For immunofluorescence start at 20 µg/mL.

XAF-1 Antibody - Additional Information

Gene ID	54739
Other Names	
XAF-1 Antibody: BIRC4BP, XIAPAF1, HSXIAPAF1, BIRC4BP, XIAP-associated factor 1, BIRC4-binding protein, XIAP associated factor 1	

Target/Specificity

XAF-1 antibody was raised against a synthetic peptide corresponding to 16 amino acids near the middle of human XAF-1.

The immunogen is located within amino acids 230 - 280 of XAF-1.

Reconstitution & Storage

XAF-1 antibody can be stored at 4°C for three months and -20°C, stable for up to one year. As with all antibodies care should be taken to avoid repeated freeze thaw cycles. Antibodies should not be exposed to prolonged high temperatures.

Precautions

XAF-1 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

XAF-1 Antibody - Protein Information

Name XAF1

Synonyms BIRC4BP, XIAPAF1

Function

Seems to function as a negative regulator of members of the IAP (inhibitor of apoptosis protein) family. Inhibits anti-caspase activity of BIRC4. Induces cleavage and inactivation of BIRC4

independent of caspase activation. Mediates TNF-alpha-induced apoptosis and is involved in apoptosis in trophoblast cells. May inhibit BIRC4 indirectly by activating the mitochondrial apoptosis pathway. After translocation to mitochondria, promotes translocation of BAX to mitochondria and cytochrome c release from mitochondria. Seems to promote the redistribution of BIRC4 from the cytoplasm to the nucleus, probably independent of BIRC4 inactivation which seems to occur in the cytoplasm. The BIRC4-XAF1 complex mediates down-regulation of BIRC5/survivin; the process requires the E3 ligase activity of BIRC4. Seems to be involved in cellular sensitivity to the proapoptotic actions of TRAIL. May be a tumor suppressor by mediating apoptosis resistance of cancer cells.

Cellular Location

Cytoplasm. Nucleus. Mitochondrion. Note=Found in the cytoplasm and nucleus of placental syncytiotrophoblasts Translocates to mitochondria upon TNF-alpha treatment [Isoform 5]: Nucleus.

Tissue Location

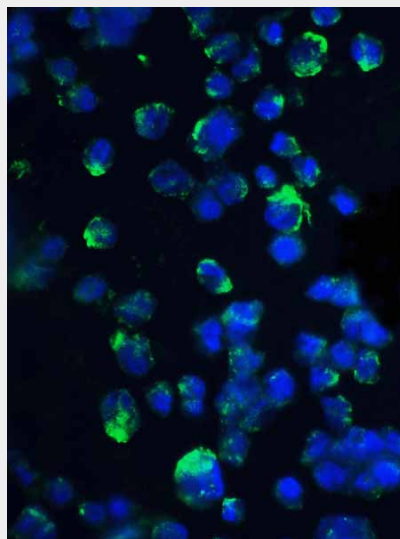
Widely expressed. Expression is frequently down-regulated in cancer cell lines. Isoform 5 is widely expressed Expressed in placenta (at protein level).

XAF-1 Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

XAF-1 Antibody - Images



Immunofluorescence of 4E-BP1 in 3T3 cells with 4E-BP1 antibody at 20 µg/ml.

XAF-1 Antibody - Background

XAF-1 Antibody: XAF-1 binds to XIAP, an inhibitor of caspases-3, -7, and -9, and triggers its

relocation from the cytosol to the nucleus. Overexpression of XAF-1 results in the neutralization of XIAP's ability to inhibit cell death. XAF-1 is normally expressed in all adult and fetal tissues but was found to be present in very low levels in a variety of cancer cell lines. In contrast, XIAP levels have been shown to be high in a majority of cell lines. Low XAF-1 and high basal expression of XIAP may therefore play a critical role in maintaining survival of cancer cell lines. Both IFN-alpha2 and IFN-beta can induce XAF-1 mRNA in all cells examined but induction of XAF-1 protein (as observed by immunoblot analysis) was seen only in cell lines sensitive to the apoptotic effects of IFNs.

XAF-1 Antibody - References

Liston P, Fong W, Kelly NL, et al. Identification of XAF1 as an antagonist of XIAP anticaspase activity. *Nature Cell Biol.* 2001;3:128-33.

Deveraux QL, Takahashi R, Savesan GS, and Reed JC. X-linked IAP is a direct inhibitor of cell-death proteases. *Nature* 1997;388:300-4.

Fong WG, Liston P, Rajcan-Separovic E, et al. Expression and genetic analysis of XIAP-associated factor 1 (XAF1) in cancer cell lines. *Genomics* 2000;70:113-122.

Leaman DW, Chawla-Sarkar M, Vyas K, et al. Identification of X-linked inhibitor of apoptosis associated factor-1 as an interferon-stimulated gene that augments TRAIL/Apo2L-induced apoptosis. *J. Biol. Chem.* 2002;277:28504-11.