

XAF-1 Antibody

Catalog # ASC10215

Specification

XAF-1 Antibody - Product Information

Application Primary Accession Other Accession Reactivity Host Clonality Isotype Calculated MW

Application Notes

WB, IHC-P, IF, E <u>Q6GPH4</u> <u>CAA68030</u>, <u>1869901</u> Human, Mouse Rabbit Polyclonal IgG Predicted: 35 kDa

Observed: 32 kDa KDa XAF-1 antibody can be used for the detection of XAF-1 by Western blot at 0.5 to 2 µg/mL. Antibody can also be used for immunohistochemistry starting at 2 µg/mL. For immunofluorescence start at 10 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 XAF1;

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

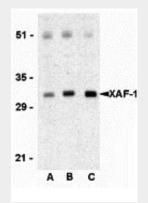
Widely expressed. Expression is frequently down- regulated in cancer cell lines. Isoform 5 is widely expressed Expressed in placenta (at protein level).

XAF-1 Antibody - Protocols

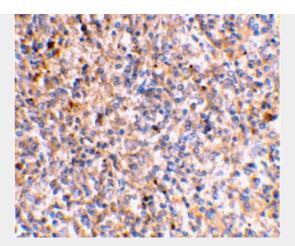
Provided below are standard protocols that you may find useful for product applications.

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

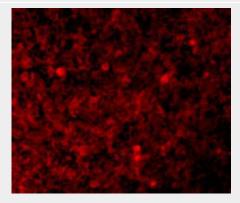
XAF-1 Antibody - Images



Western blot analysis of XAF-1 in human spleen lysate with XAF-1 antibody at (A) 0.5 , (B) 1 , and (C) 2 μ g/mL, respectively.



Immunohistochemical staining of human spleen tissue using XAF-1 antibody at 2 μ g/mL.



Immunofluorescence of XAF-1 in Human Spleen tissue with XAF-1 antibody at 10 μ g/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.