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# XAF-1 Antibody

Catalog # ASC10274

## Product Information

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| **Application** | WB, IF, E |
| **Primary Accession** | Q6GPH4 |
| **Other Accession** | CAA68030, 1869901 |
| **Reactivity** | Human |
| **Host** | Rabbit |
| **Clonality** | Polyclonal |
| **Isotype** | IgG |
| **Calculated MW** | 34626 |
| **Concentration (mg/ml)** | 1 mg/mL |
| **Conjugate** | Unconjugated |
| **Application Notes** | XAF-1 antibody can be used for the detection of XAF-1 by Western blot at 1 - 4 g/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 g/mL. |

## Additional Information

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| **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-1antibody can be stored at 4℃ for three months and -20℃, 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. |

## Protein Information

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| **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 |

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| | 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). |

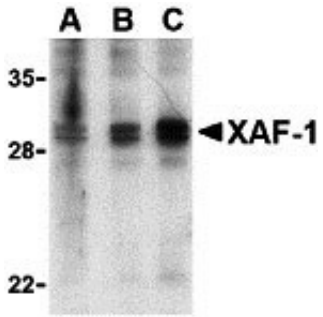
## Background

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.

## References

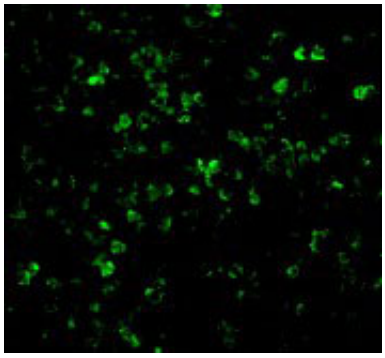

Liston P, Fong W, Kelly NL, et al. Identification of XAF1 as an antagonist of XIAP anticaspase activity. Nature Cell Biol. 2001;3:128-33.
Deveraux QL, Takahashi R, Savesan GS, and Reed JC. X-linked IAP is a direct inhibitor of cell-death proteases. Nature 1997;388:300-4.
Fong WG, Liston P, Rajcan-Separovic 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.


## Images




Western blot analysis of XAF-1 in human spleen lysate with XAF-1 antibody (IN) at 1 (lane A), 2 (lane B), and 4 (lane C) µg/mL, respectively.

Immunofluorescence of XAF-1 in Human Spleen cells with XAF-1 antibody at 20 µg/mL.



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