

## 20-1004: Polyclonal antibody to APAF-1

<b>Clonality :</b>	Polyclonal
<b>Application :</b>	IP,IHC,WB
<b>Reactivity :</b>	Rat,Mouse,Human
<b>Gene :</b>	APAF1
<b>Gene ID :</b>	317
<b>Uniprot ID :</b>	O14727
<b>Format :</b>	Sera
<b>Alternative Name :</b>	APAF1,KIAA0413
<b>Isotype :</b>	Rabbit IgG
<b>Immunogen Information :</b>	A full-length recombinant protein of APAF-1 was used as immunogen for this antibody

### Description

Apaf 1 (apoptosis protease-activating factor-1) is a key regulator of the mitochondrial apoptotic pathway, being the central element of the multimeric apoptosome. The apoptosome consists of cytochrome c, procaspase-9 and seven Apaf 1 monomers, and is considered to be core apoptotic machinery that executes mitochondria-dependent apoptosis. Cytochrome c, normally compartmentalized in the mitochondria, is released into the cytoplasm following apoptotic stimuli. Apaf 1 binds cytochrome c in the cytoplasm and in the presence of dATP/ATP forms the apoptosome. The apoptosome binds procaspase-9 and promotes its autocatalytic activation. Active caspase-9, in turn, activates downstream caspases including 3, 6, and 7 contributing to the proteolytic caspase activation cascade which leads to cell death.

### Product Info

<b>Amount :</b>	50 µl
<b>Content :</b>	50 µl sera
<b>Storage condition :</b>	Store the antibody at 4°C, stable for 6 months. For long-term storage, store at -20°C. Avoid repeated freeze and thaw cycles.

### Application Note

WB: 1:1000-1:2000, IHC (paraffin): 1:1000-1:5000, IHC (frozen): Users should optimize, IP: 1:50-1:200

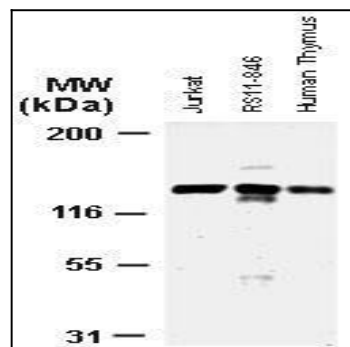


Fig:1 Western blot analysis of Apaf 1 using 20-1004 at 1:2000. Jurkat: human T-cell leukemia cell line lysate. RS11-846: human B-cell leukemia cell line lysate. Human thymus: tissue lysate.

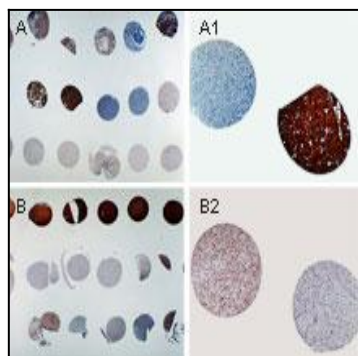


Fig:2 Formalin-fixed, paraffin-embedded sections from a human brain tumor tissue microarray stained for Apaf 1 expression using 20-1004 at 1:2000. A and B. Tissue microarray overview. A1 and B1, higher magnification of cores from A and B, respectively. Differential expression of Apaf 1 is seen between patient samples. Hematoxylin-eosin counterstain.

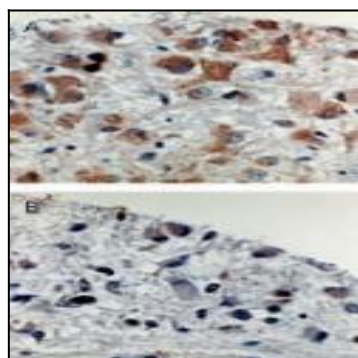


Fig:3 Formalin-fixed, paraffin-embedded tissue sections of human brain tumors stained for Apaf 1 expression using 20-1004 at 1:2000. A. Gemistocytoma (grade II). B. Anaplastic glioma. A high level of Apaf 1 was observed in the gemistocytoma whereas a low level was seen in the more malignant anaplastic glioma. Hematoxylin-eosin counterstain.