

20-1004: Polyclonal antibody to APAF-1

Clonality :	Polyclonal
Application :	IP,IHC,WB
Reactivity :	Rat,Mouse,Human
Gene :	APAF1
Gene ID :	317
Uniprot ID :	O14727
Format :	Sera
Alternative Name :	APAF1,KIAA0413
Isotype :	Rabbit IgG
Immunogen Information :	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

Amount :	50 μ l
Content :	50 μ l sera
Storage condition :	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

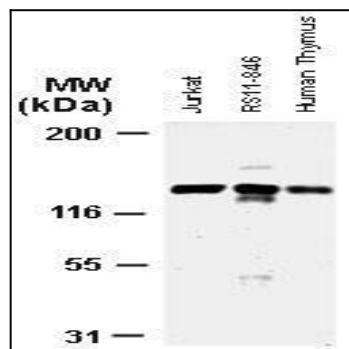


Fig:1 Western blot analysis of Apaf 1 using 20-1004 at 1:2000. Jurkat: human T-cell leukemia cell line lysate. RS11-846: human B-cell leukemia cell line lysate. Human thymus: tissue lysate.

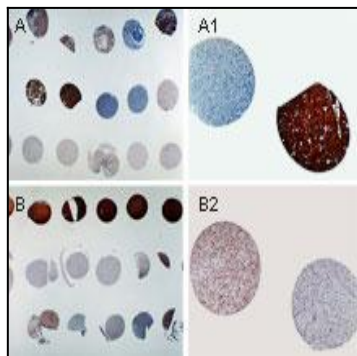


Fig:2 Formalin-fixed, paraffin-embedded sections from a human brain tumor tissue microarray stained for Apaf 1 expression using 20-1004 at 1:2000. A and B. Tissue microarray overview. A1 and B1, higher magnification of cores from A and B, respectively. Differential expression of Apaf 1 is seen between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

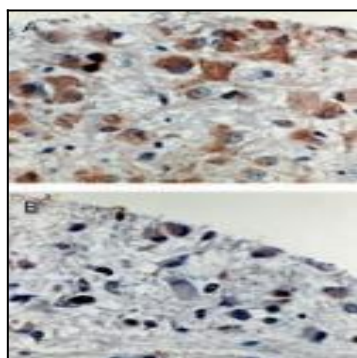


Fig:3 Formalin-fixed, paraffin-embedded tissue sections of human brain tumors stained for Apaf 1 expression using 20-1004 at 1:2000. A. Gemistocytoma (grade II). B. Anaplastic glioma. A high level of Apaf 1 was observed in the gemistocytoma whereas a low level was seen in the more malignant anaplastic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