

## Apaf1 Antibody

### *Apaf1 (CT): Apoptotic protease activating factor 1*

**CATALOG NO.:** 2015

#### **BACKGROUND:**

Apoptosis is related to many diseases and induced by a family of cell death receptors and their ligands. Cell death signals are transduced by death domain containing adapter molecules and members of the caspase family of proteases. The mammalian homologous of the key cell death gene CED-4 in *C. elegans* was identified recently from human and mouse and designated Apaf1 for apoptosis protease-activating factor 1 (1,2). Apaf1 binds to cytochrome c (Apaf2) and caspase-9 (Apaf3), which leads to caspase-9 activation. Activated caspase-9 in turn cleaves and activates caspase-3 that is one of the key proteases, being responsible for the proteolytic cleavage of many key proteins in apoptosis (3). Apaf1 can also associate with caspase-4 and caspase-8 (4). Apaf1 transcript is ubiquitously expressed in human tissues (1).

#### **SOURCE:**

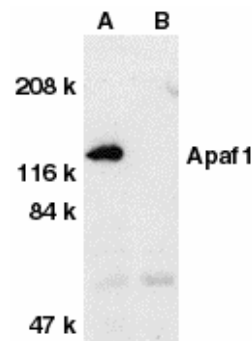
Rabbit polyclonal Apaf1 antibody was raised against a peptide corresponding to amino acids near the carboxy terminus of human Apaf1 (1). The sequence of the immunogenic peptide differs from that of murine Apaf1 by one amino acid (1,2)

#### **APPLICATION:**

Apaf1 antibody can be used for detection of Apaf1 by Western blot at 0.5 – 1 µg/ml. (Optimal dilution should be determined by user.) Human heart tissue lysate can be used as positive control and a 130 kDa band should be detected. Apaf1 antibody is human, mouse and rat reactive. **For research use only.**

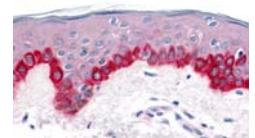
#### **STORAGE:**

Apaf1 antibody is supplied as immunoaffinity chromatography purified IgG in PBS containing 0.02% sodium azide. Store at 4°C, stable for one year.



Western blot analysis of Apaf1 in human heart tissue lysate with Apaf1 antibody at 1 µg/ml dilution in the absence (A) or presence (B) of blocking peptide.

Immunohistochemistry of Apaf1 in human skin tissue with Apaf1 antibody at 20 µg/ml.



#### **RELATED PRODUCTS:**

Blocking peptide, Catalog No. **2015P**.  
Human Heart Tissue Lysate, Catalog No. **1301**.  
Caspase-4 Antibody, Catalog No. **3451**.  
Caspase-8 Antibody, Catalog No. **3473**.  
Caspase-9 Antibody, Catalog No. **2073**.

#### **REFERENCES:**

1. Zou H, Henzel WJ, Liu X, et al. Apaf-1, a human protein homologous to *C. elegans* CED-4, participates in cytochrome c-dependent activation of caspase-3. *Cell* 1997; 90:405-13.
2. Cecconi F, Alvarez-Bolado G, Meyer BI, et al. Apaf1 (CED-4 homolog) regulates programmed cell death in mammalian development. *Cell* 1998; 94:727-37.
3. Li P, Nijhawan D, Budihardjo I, et al. Cytochrome c and dATP-dependent formation of Apaf-1/caspase-9 complex initiates an apoptotic protease cascade. *Cell* 1997; 91:479-89.
4. Hu Y, Benedict MA, Wu D, et al. Bcl-XL interacts with Apaf-1 and inhibits Apaf-1-dependent caspase-9 activation. *Proc Natl Acad Sci USA* 1998; 95:4386-91. (RD1005)