



Anti-Apaf-1 (CT), rabbit polyclonal

Catalog Number: 905-179

Quantity: 100 µg

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).

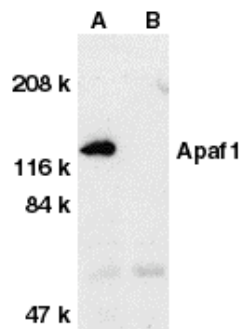
Source: Rabbit anti-Apaf1 (CT) polyclonal antibody was raised against a peptide corresponding to amino acids 1158 to 1177 of human Apaf1 (1). The sequence of the immunogenic peptide differs from that of murine Apaf1 by one amino acid (1,2)

Purification: Affinity Purified

Form: In PBS containing 0.02% sodium azide.

Stability: Stable for one year when store at 4°C.

Application: This polyclonal antibody can be used for detection of Apaf1 by Western blot at 1:500 to 1:2000 dilution. Human heart tissue lysate can be used as positive control and a 130 kDa band should be detected. It is human, mouse, and rat reactive. For research use only.



For Research Use Only; Not for Therapeutic or Diagnostic Use.

References:

1. Zou H, Henzel WJ, Liu X, Lutschg A, Wang X. 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, Roth KA, Gruss P. Apaf1 (CED-4 homolog) regulates programmed cell death in mammalian development. *Cell* 1998;94:727-37
3. Li P, Nijhawan D, Budihardjo I, Srinivasula SM, Ahmad M, Alnemri ES, Wang X. 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, Inohara N, Nunez G. Bcl-XL interacts with Apaf-1 and inhibits Apaf-1-dependent caspase-9 activation. *Proc Natl Acad Sci USA* 1998;95:4386-91

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