

Anti-Apaf-1 (NT)

CATALOG No.: PX043A SIZE: 100 μg

PX043B SIZE: 0.5 mg

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 homologues of the key cell death gene CED-4 in *C. elegans* has been identified recently from human and mouse and designated Apaf-1 (for apoptosis protease-activating factor 1) (1,2). Apaf-1 binds to cytochrome c (Apaf-2) and caspase-9 (Apaf-3), 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). Apaf-1 can also associate with caspase-4 and caspase-8 (4). Apaf-1 is ubiquitously expressed in human tissues (1).

SOURCE:

Rabbit anti-Apaf-1 (NT) polyclonal antibody was raised against a peptide corresponding to amino acids 12 to 28 of human Apaf-1 (1). The sequences of the immunogenic peptide are identical between human and mouse (1,2)

APPLICATION:

This polyclonal antibody can be used for detection of Apaf-1 by Western blot at 1:1000 to 1:2000 dilution. Whole cell lysate from HeLa cells can be used as positive control and a 130 kDa band should be detected. It is human, mouse, and rat reactive.

This antibody is for research use only.

STORAGE:

It is supplied as immunoaffinity chromatography purified IgG, 100 μg in 200 μl of PBS containing 0.02% sodium azide. Store at 4°C, stable for one year.

REFERENCES:

- 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
- 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
- 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

E-mail: info@cellsciences.com

Web Site: www.cellsciences.com

CAUTION: NOT FOR USE IN HUMANS. FOR RESEARCH PURPOSES ONLY.

Toll Free: 888-769-1246

Phone: 781-828-0610

Fax: 781-828-0542