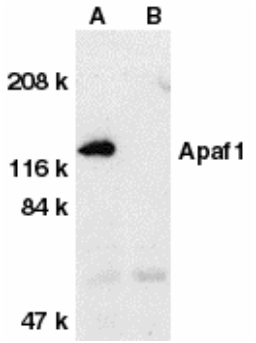
cellsciences.com

Anti-Apaf1 (CT)

CATALOG No.: PX042A SIZE: 100 µg
PX042B SIZE: 0.5 mg



Western blot analysis of Apaf1 in human heart tissue lysate with anti-Apaf1 (2015) at 1:500 dilution in the absence (A) or presence (B) of blocking peptide.

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)

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.

RELATED PRODUCTS:

Blocking peptide, 50 µg / 250 µl, is available for competition studies.

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:

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

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

Cell Sciences, Inc.
480 Neponset Street
Bldg 12A
Canton, MA 02021

Toll Free: 888-769-1246
Phone: 781-828-0610
Fax: 781-828-0542

E-mail: info@cellsciences.com
Web Site: www.cellsciences.com