

Anti-AIF (IN)

CATALOG No.: PX008A
PX008B

SIZE: 100 µg
0.5 mg

BACKGROUND:

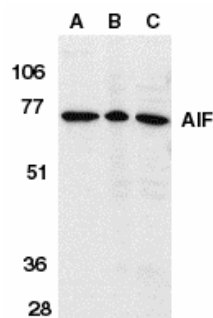
Apoptosis is characterized by several morphological nuclear changes including chromatin condensation and nuclear fragmentation. These changes are triggered by the activation of members of caspase family, caspase activated DNase, and several novel proteins (1). A novel gene, the product of which causes chromatin condensation and DNA fragmentation, was recently identified, cloned, and designated apoptosis inducing factor (AIF) (2). Like the critical molecules, cytochrome c and caspase-9, in apoptosis, AIF localizes in mitochondria. AIF translocates to the nucleus when apoptosis is induced and induces mitochondria to release the apoptogenic proteins cytochrome c and caspase-9. AIF induces chromatin condensation and large scale DNA fragmentation, which are the hallmarks of apoptosis, of the isolated nucleus and the nucleus in live cells by microinjection and apoptosis stimuli (2,3). AIF is highly conserved between human and mouse and widely expressed (2).

SOURCE:

Rabbit anti-AIF (IN) polyclonal antibody was raised against a peptide corresponding to amino acids 517 to 531 of human AIF (2). This sequence is identical to those of mouse and rat AIF (2).

APPLICATION:

This polyclonal antibody can be used for detection of AIF by Western blot at 0.25 to 1 µg/ml. K562 cell lysate can be used as positive control and a 67 kDa band should be detected. It is human, mouse and rat reactive. For research use only.



Western blot analysis of AIF in K562 cell lysate (A), rat heart (B), and mouse heart (C) tissue lysates with anti-AIF (IN) at 1 µg/ml.

STORAGE:

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

RELATED PRODUCTS:

Blocking peptide, 50 µg at 200 µg/ml, is available for competition studies.

K562 cell lysate, 200 µg at 2 mg/ml, is available for positive control.

REFERENCES:

1. Zamzami N, Kroemer G. Condensed matter in cell death. *Nature* 1999;401:127-8
2. Susin SA, Lorenzo HK, Zamzami N, et al. Molecular characterization of mitochondrial apoptosis-inducing factor. *Nature* 1999;397:441-6
3. Daugas E, Susin SA, Zamzami N, et al. Mitochondrio-nuclear translocation of AIF in apoptosis and necrosis. *FASEB J* 2000;14:729-39

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