

**Aif (IN) apoptosis inducing factor. Rabbit Polyclonal Antibody**  
Apoptosis Inducing Factor (IN)

**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 DNA fragmentation, which are the hallmarks of apoptosis, of the isolated nucleus and the nucleus in live cells by microinjection. AIF is highly conserved between human and mouse and widely expressed (2).

**ORDERING INFORMATION**

**CATALOG NUMBER**

X1108P

**SIZE**

100 µg

**FORM**

Unconjugated

**HOST/CLONE**

Rabbit

**FORMULATION**

Provided in phosphate buffered saline solution containing 0.02% sodium azide as a preservative

**CONCENTRATION**

See vial for concentration

**ISOTYPE**

IgG

**APPLICATIONS**

Western Blot

**SPECIES REACTIVITY**

Human, Mouse, Rat

**ACCESSION NUMBER**

Human Q95831

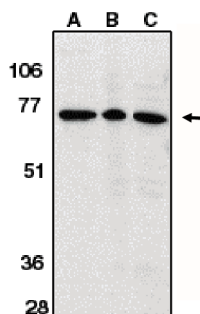
Mouse Q9Z0X1

Rat Q9JM53

**IMMUNOGEN**

A synthetic peptide corresponding to amino acids 517 to 531 of human AIF (2). This sequence is identical to those of mouse and rat AIF (2).

**Western blot analysis using anti-AIF (IN) antibody at 1 µg/ml on K562 cell lysate (A) and rat (B) and mouse (C) heart tissue lysates.**



**POSITIVE CONTROL/TISSUE EXPRESSION**

K562 cell lysate

**COMMENTS**

Detects AIF by Western blot at of 0.25 to 1  $\mu$ g/ml. Detects a 67 kDa band in K562 cell lysate. Optimal concentration should be evaluated by serial dilutions.

**PURIFICATION**

Antigen Immunoaffinity Purification

**SHIP CONDITIONS**

Ship at ambient temperature, freeze upon arrival

**STORAGE CUSTOMER**

Product should be stored at -20°C. Aliquot to avoid freeze/thaw cycles

**STABILITY**

Products are stable for one year from purchase when stored properly

**REFERENCES**

1. Condensed matter in cell death. Zamzami, N. and Kroemer, G. Nature 1999, 401, 127-8
2. Molecular characterization of mitochondrial apoptosis-inducing factor. Susin, S.A., et al., Nature 1999, 397, 441-6

**PRODUCT SPECIFIC REFERENCES**

1. Pantic, B., et al. 'Myotonic dystrophy protein kinase (DMPK) prevents ROS-induced cell death by assembling a hexokinase II-Src complex on the mitochondrial surface.' Cell Death and Disease, Oct 2013, 4(10): e858