

Aif (CT) apoptosis inducing factor. Rabbit Polyclonal Antibody
Apoptosis Inducing Factor (CT), PDCD8

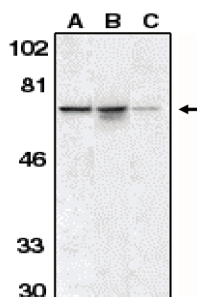
BACKGROUND

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).

IMMUNOGEN

A synthetic peptide (KDGEQHEDLNEVAK) corresponding to amino acids 593 to 606 of human AIF (2). This sequence is identical to those of mouse and rat AIF (2).

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



ORDERING INFORMATION

CATALOG NUMBER

X1107P

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

POSITIVE CONTROL/TISSUE EXPRESSION

K562 cell lysate

COMMENTS

Detects AIF by Western blot at of 0.25 to 1 $\mu\text{g/ml}$. 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