

Anti-ICAD (NT)

CATALOG No.: PX027A
PX027B

SIZE: 100 µg
0.5 mg

BACKGROUND:

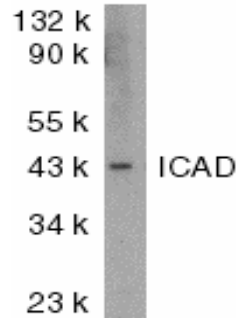
Apoptosis is related to many diseases and induced by a family of cell death receptors and their ligands. Cell death signals are transduced by death domain containing adapter molecules and members of the caspase family of proteases. These death signals finally cause the degradation of chromosomal DNA by activated DNase. A human DNA fragmentation factor (DFF) was identified recently which is cleaved by caspase-3 during apoptosis (1). Mouse homologue of human DFF was identified as a DNase inhibitor designated ICAD, for inhibitor of caspase-activated DNase (2,3). Upon cleavage of DFF/ICAD, a caspase activated deoxyribonuclease (CAD) is released and activated and eventually causes the degradation of DNA in the nuclei (2,3). Therefore, the cleavage of CAD inhibitor molecule DFF/ICAD, which causes DNase activation and DNA degradation, is the hallmark of apoptotic cell death (4).

SOURCE:

Rabbit anti-ICAD (NT) polyclonal antibody was raised against a peptide corresponding to amino acids 2 to 21 of mouse ICAD (2).

APPLICATION:

This polyclonal antibody can be used for detection of ICAD by Western blot at 1:500 to 1:1000 dilution. Murine lung tissue lysate can be used as positive control and a 45 kDa band can be detected. This antibody is for research use only.



Western blot analysis of ICAD in murine lung tissue lysate with anti-ICAD (NT) at 1:500 dilution.

STORAGE:

It is supplied as affinity 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. Liu X, Zou H, Slaughter C, Wang X. DFF, a heterodimeric protein that functions downstream of caspase-3 to trigger DNA fragmentation during apoptosis. *Cell* 1997;89:175-184
2. Enari M, Sakahira H, Yokoyama H, Okawa K, Iwamatsu A, Nagata S. A caspase-activated DNase that degrades DNA during apoptosis, and its inhibitor ICAD. *Nature* 1998;391:43-50
3. Sakahira H, Enari M, Nagata S. Cleavage of CAD inhibitor in CAD activation and DNA degradation during apoptosis. *Nature* 1998;391:96-99
4. Wyllie A. Apoptosis. An endonuclease at last. *Nature* 1998;391:20-21

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



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