

Anti-DFF40/CAD (I18)

CATALOG No.: PX018A
PX018B

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 mouse DNase that causes DNA fragmentation was identified recently and designated CAD (for caspase activated deoxyribonuclease) (1,2). The human homologue of mouse CAD was more recently identified by three groups independently and termed CPAN, DFF40, and human CAD, respectively, (3-5). DFF45/ICAD is the inhibitory protein of DFF40/CAD (1,2,6) and forms complex with DFF40/CAD. Upon cleavage of DFF45/ICAD by activated caspase, DFF40/CAD is released and activated and eventually causes the degradation of DNA in the nuclei. Activation of DFF40/CAD, which causes DNA degradation, is the hallmark of apoptotic cell death.

SOURCE:

Rabbit anti-CAD (I18) polyclonal antibody was raised against a peptide corresponding to amino acids 147 to 164 of murine CAD (1). The sequence differs from human DFF40 by two amino acids (3,4)

APPLICATION:

This polyclonal antibody can be used for detection of DFF40/CAD by Western blot at 1:500 to 1:1000 dilution. K562 or Jurkat whole cell lysate can be used as positive control and a 40 kDa band can be detected. It is human, mouse, and rat reactive. For research use only.

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.

Western blot analysis of DFF40/CAD in HeLa (H), K562 (K), Jurkat (J), and Raji (R) whole cell lysate with anti-DFF40/CAD (I18) at 1:500 dilution.

REFERENCES:

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4. Liu X, Li P, Widlak P, Zou H, Luo X, Garrard WT, Wang X The 40-kDa subunit of DNA fragmentation factor induces DNA fragmentation and chromatin condensation during apoptosis. *Proc Natl Acad Sci USA* 1998;95:8461-6
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CAUTION: NOT FOR USE IN HUMANS. FOR RESEARCH PURPOSES ONLY.



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