

# PRODUCT DATA SHEET

Product: Anti-DFF40 / CAD (I18), Polyclonal

Cat. No: PC-150 (100 μg)

#### Description:

Deregulation of apoptosis is related to a variety of diseases. Apoptosis can be induced by a family of cell death receptors and their ligands. 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). The human homolog of mouse CAD was termed CPAN, DFF40, and human CAD, respectively. DFF45(ICAD) is the inhibitory protein of DFF40(CAD). Upon cleavage of DFF45(ICAD) by activated caspase, DFF40(CAD) is released from the DFF45(ICAD) complex and activated and eventually causes the degradation of DNA in the nuclei. Activation of DFF40(CAD) causes DNA degradation, which is the mark of apoptotic cell death.

### Specificity:

Recognizes human, mouse, and rat DFF40 / CAD. Detects a band of ~40 kDa by Western blot.

# Species Reactivity:

Human, mouse, and rat, other species not tested.

#### Ig Isotype:

Rabbit IgG

## Immunogen:

Synthetic peptide corresponding to aa 147-164 (E<sup>147</sup>GLESRFRNKSGYLRYS<sup>164</sup>) of mouse caspase activated deoxyribonuclease (CAD). The sequence differs from human DFF40 by two amino acids.

#### Format:

100  $\mu g$  of purified rabbit IgG in 200  $\mu l$  PBS containing 0.02% sodium azide.

# Storage and Stability:

Store at +4°C.

#### Applications and Suggested Dilutions:

■ Western blot: 1:500 – 1:1,000

The optimal dilution for a specific application should be determined by the researcher.

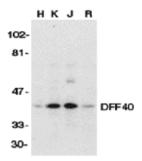


Figure: Western blot analysis of DFF40/CAD in HeLa (H), K562 (K), Jurkat (J), and Raji (R) whole cell lysate with anti-DFF40/CAD (I18) at 1:500 dilution.

#### Limitations:

For *in vitro* research use only. Not for use in diagnostics or in humans.

#### Warranty:

No warranties, expressed or implied, are made regarding the use of this product. KAMIYA BIOMEDICAL COMPANY is not liable for any damage, personal injury, or economic loss caused by this product.

