

Rabbit Anti-Mouse ICAD (Inhibitor of CAD, DFF45, DNA Fragmentation Factor 45; NT)

Instruction Manual

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| Catalog Number | PK-AB718-2001 |
| Synonyms | ICAD Antibody: DFF45 |
| Description | 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. Mouse homologue of human DFF was identified as a DNase inhibitor designated ICAD, for inhibitor of caspase-activated DNase. Upon cleavage of DFF/ICAD, a caspase activated deoxyribonuclease (CAD) is released and activated and eventually causes the degradation of DNA in the nuclei. Therefore, the cleavage of CAD inhibitor molecule DFF/ICAD, which causes DNase activation and DNA degradation, is the hallmark of apoptotic cell death. |
| Quantity | 100 µg |
| Source / Host | Rabbit |
| Immunogen | Rabbit polyclonal ICAD antibody was raised against a peptide corresponding to amino acids near the amino terminus of mouse ICAD. |
| Purification Method | Affinity chromatography purified via peptide column. |
| Clone / IgG Subtype | Polyclonal antibody |
| Species Reactivity | Mouse |
| Specificity | |
| Formulation | Antibody is supplied in PBS containing 0.02% sodium azide. |
| Reconstitution | During shipment, small volumes of antibody will occasionally become entrapped in the seal of the product vial. For products with volumes of 200 µl or less, we recommend gently tapping the vial on a hard surface or briefly centrifuging the vial in a tabletop centrifuge to dislodge any liquid in the container's cap. |
| Storage & Stability | Antibody can be stored at 4°C for three months and at -20°C for up to one year. As with all antibodies care should be taken to avoid repeated freeze thaw cycles. Antibodies should not be exposed to prolonged high temperatures. |
| Applications | E, WB, IHC, IF INote: Antibody might be suitable for other applications not tested so far. Optimal concentrations for each application have to be determined individually.h application have to be determined individually. ICAD antibody can be used for detection of ICAD by Western blot at 1 µg/mL. A 45 kDa band can be detected. Antibody can also be used for immunohistochemistry starting at 2 µg/mL. For immunofluorescence start at 10 µg/mL. |
| Images | Available upon request. |
| References | Liu X, Zou H, Slaughter C, Wang X. DFF, a heterodimeric protein that functions downstream of caspase-3 to trigger DNA fragmentation during apoptosis. <i>Cell</i> 1997;89:175-184 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. <i>Nature</i> 1998;391:43-50 Sakahira H, Enari M, Nagata S. Cleavage of CAD inhibitor in CAD activation and DNA degradation during apoptosis. <i>Nature</i> 1998;391:96-99 Wyllie A. Apoptosis. An endonuclease at last. <i>Nature</i> 1998;391:20-21 |
| Images | Available upon request. |
| Related Products | Blocking Peptide, Cat. No. PK-AB718-2001P Mouse lung Cell Lysate, Cat. No. PK-AB718-1402 ICAD Antibody (CT), Cat. No. PK-AB718-2003 DFF/ICAD Antibody (NT), Cat. No. PK-AB718-1148 |
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