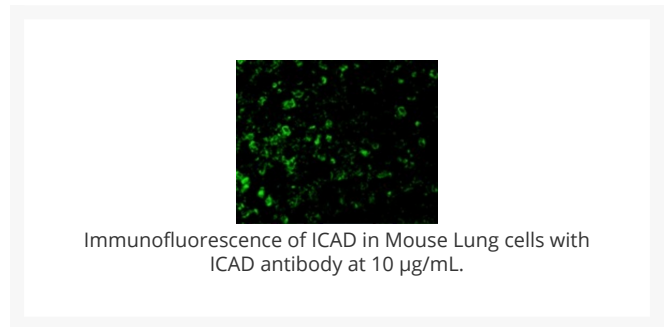
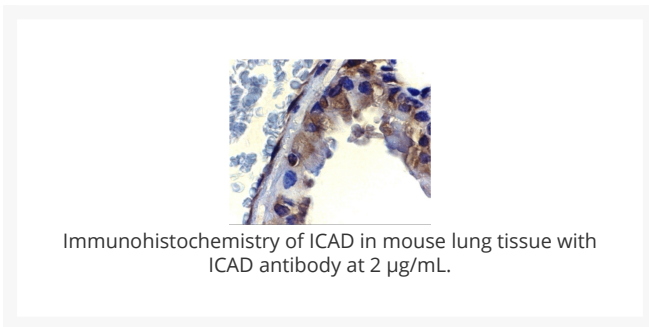
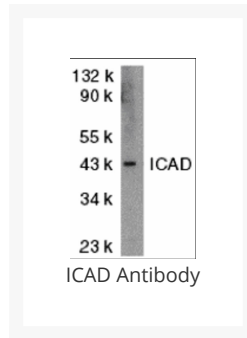




# ICAD Antibody

Cat. No.: 2001



## Ψ Specifications

<b>HOST SPECIES:</b>	Rabbit
<b>SPECIES REACTIVITY:</b>	Mouse
<b>IMMUNOGEN:</b>	ICAD antibody was raised against a peptide corresponding to amino acids near the amino terminus of mouse ICAD.  The immunogen is located within the first 50 amino acids of ICAD.
<b>TESTED APPLICATIONS:</b>	ELISA, IF, IHC-P, WB

<b>APPLICATIONS:</b>	<p>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.</p> <p>Antibody validated: Western Blot in mouse samples; Immunohistochemistry in mouse samples and Immunofluorescence in mouse samples. All other applications and species not yet tested.</p>
<b>POSITIVE CONTROL:</b>	1) Cat. No. 1402 - Mouse Lung Tissue Lysate
<b>PREDICTED MOLECULAR WEIGHT:</b>	45 kDa

## Ψ Properties

<b>PURIFICATION:</b>	ICAD Antibody is affinity chromatography purified via peptide column.
<b>CLONALITY:</b>	Polyclonal
<b>ISOTYPE:</b>	IgG
<b>CONJUGATE:</b>	Unconjugated
<b>PHYSICAL STATE:</b>	Liquid
<b>BUFFER:</b>	ICAD Antibody is supplied in PBS containing 0.02% sodium azide.
<b>CONCENTRATION:</b>	batch dependent
<b>STORAGE CONDITIONS:</b>	ICAD antibody can be stored at 4 °C for three months and -20 °C, stable 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.

## Ψ Additional Info

<b>OFFICIAL SYMBOL:</b>	Dffa
<b>ALTERNATE NAMES:</b>	ICAD Antibody: ICAD, DFF35, Dff45, ICAD-L, ICAD-S, A330085O09Rik, Icad, DNA fragmentation factor subunit alpha, DNA fragmentation factor 45 kDa subunit, DFF-45
<b>ACCESSION NO.:</b>	O54786
<b>PROTEIN GI NO.:</b>	9087146
<b>GENE ID:</b>	13347
<b>USER NOTE:</b>	Optimal dilutions for each application to be determined by the researcher.

## Ψ Background and References

<b>BACKGROUND:</b>	<p>ICAD Antibody: 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.</p>
<b>REFERENCES:</b>	<p>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. <i>Cell</i> 1997;89:175-184</p>
	<p>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. <i>Nature</i> 1998;391:43-50</p>
	<p>3) 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</p>
	<p>4) Wyllie A. Apoptosis. An endonuclease at last. <i>Nature</i> 1998;391:20-21 (RD1299)</p>

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