

ICAD Antibody
Catalog # ASC10035**Specification**

ICAD Antibody - Product Information

Application	IF
Primary Accession	O54786
Other Accession	O54786 , 13347
Reactivity	Mouse
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Calculated MW	45 kDa KDa
Application Notes	ICAD antibody can be used for detection of of ICAD by Western blot at 1:1000 dilution. A 45 kDa band can be detected. Antibody can also be used for immunohistochemistry starting at 5 µg/mL. For immunofluorescence start at 5 µg/mL.

ICAD Antibody - Additional InformationGene ID **13347****Other Names**

ICAD Antibody: ICAD, DFF35, Dff45, ICAD-L, ICAD-S, A330085O09Rik, Icad, DNA fragmentation factor subunit alpha, DNA fragmentation factor 45 kDa subunit, DFF-45, DNA fragmentation factor, alpha subunit

Target/Specificity

ICAD antibody was raised against a 20 amino acid peptide near the carboxy terminus of mouse ICAD.
The immunogen is located within the last 50 amino acids of ICAD.

Reconstitution & Storage

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.

Precautions

ICAD Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

ICAD Antibody - Protein Information**Name** Dffa**Synonyms** Icad**Function**

Inhibitor of the caspase-activated DNase (DFF40).

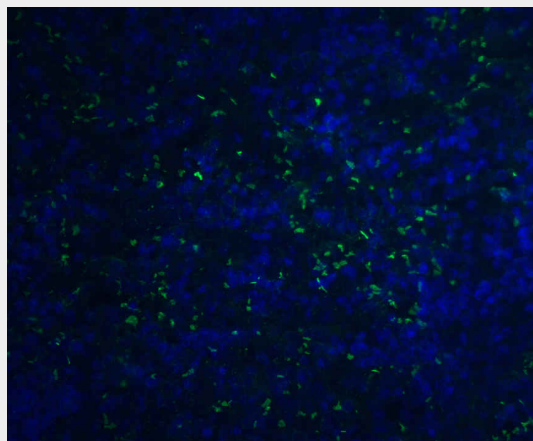
Cellular Location

Cytoplasm.

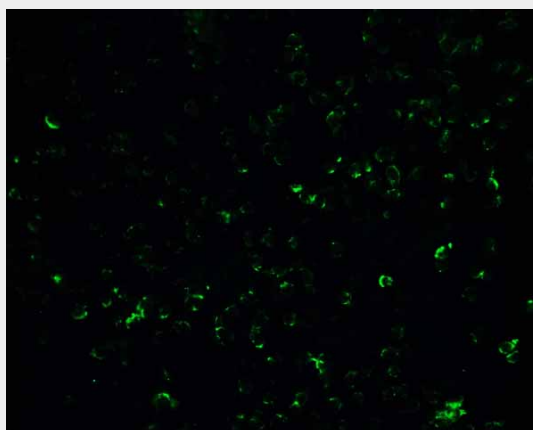
ICAD Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

ICAD Antibody - Images

Immunofluorescence of ORAI1 in rat spleen tissue with ORAI1 antibody at 5 µg/ml.



Immunofluorescence of Vinculin in Jurkat cells with Vinculin antibody at 20 µg/ml.

ICAD Antibody - Background

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 was 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.

ICAD Antibody - 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. *Cell* 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. *Nature* 1998;391:43-50
Sakahira H, Enari M, Nagata S. Cleavage of CAD inhibitor in CAD activation and DNA degradation during apoptosis. *Nature* 1998;391:96-99
Wyllie A. Apoptosis. An endonuclease at last. *Nature* 1998;391:20-21 (RD1299)