10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

ICAD Antibody
Catalog # ASC10034

Specification

ICAD Antibody - Product Information

Application	**WB, IHC-P, IF, E**
Primary Accession	O54786
Other Accession	O54786, 9087146
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 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.**

ICAD Antibody - Additional Information

Gene 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
Dffa;

Reconstitution & Storage
ICAD antibody can be stored at 4℃ for three months and -20℃, 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).

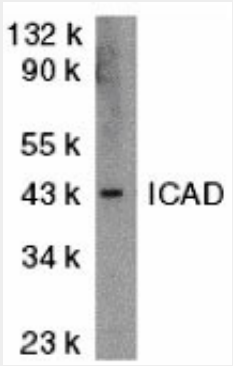
Cellular Location
Cytoplasm.

ICAD Antibody - Protocols

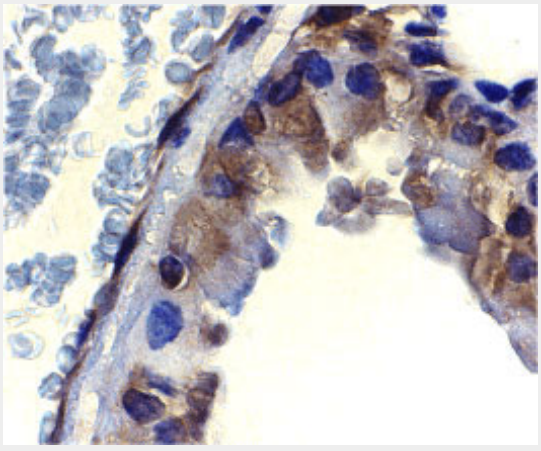
Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

ICAD Antibody - Images

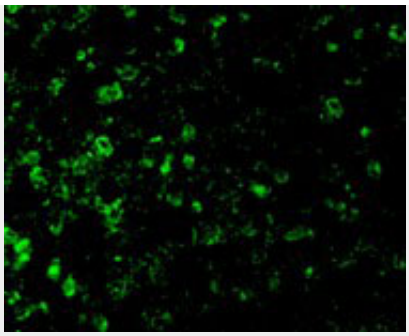


Western blot analysis of ICAD in mouse lung tissue lysate with ICAD antibody at 1 µg/mL.



Immunohistochemistry of ICAD in mouse lung tissue with ICAD antibody at 2 µg/mL.

10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999



Immunofluorescence of ICAD in Mouse Lung cells with ICAD antibody at 10 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 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.

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;39120-21 (RD1299)