

**Datasheet for 600-401-BS7****ICAD Antibody****Overview**

|                      |                                           |
|----------------------|-------------------------------------------|
| <b>Description:</b>  | Anti-ICAD (RABBIT) Antibody - 600-401-BS7 |
| <b>Item No.:</b>     | 600-401-BS7                               |
| <b>Size:</b>         | 100 µg                                    |
| <b>Applications:</b> | ELISA, IF, IHC, WB                        |
| <b>Reactivity:</b>   | Mouse                                     |
| <b>Host Species:</b> | Rabbit                                    |

**Product Details**

|                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|----------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Background:</b>   | 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. |
| <b>Synonyms:</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>Host Species:</b> | Rabbit                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| <b>Clonality:</b>    | Polyclonal                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| <b>Format:</b>       | IgG                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |

**Target Details**

|                        |                    |
|------------------------|--------------------|
| <b>Gene Name:</b>      | Dffa               |
| <b>Reactivity:</b>     | Mouse              |
| <b>Immunogen Type:</b> | Conjugated Peptide |

|                            |                                                                                                                                                                               |
|----------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Immunogen:</b>          | Anti-ICAD antibody was prepared from whole rabbit serum produced by repeated immunizations with a peptide corresponding to amino acids near the N-terminus of mouse ICAD.     |
| <b>Purity/Specificity:</b> | Anti-ICAD Antibody was affinity purified from monospecific antiserum by immunoaffinity chromatography. Cross reactivity with ICAD from other sources has not been determined. |
| <b>Relevant Links:</b>     | <ul style="list-style-type: none"><li>• <a href="#">UniProtKB - O54786</a></li><li>• <a href="#">GeneID - 13347</a></li><li>• <a href="#">NCBI - NP_001020467.1</a></li></ul> |

## Application Details

|                             |                                                                                                                                                                                                                                                                                          |
|-----------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Tested Applications:</b> | ELISA, IF, IHC, WB                                                                                                                                                                                                                                                                       |
| <b>Application Note:</b>    | Anti-ICAD Antibody has been tested for use in ELISA, Western Blotting, Immunohistochemistry and Immunofluorescence. Specific conditions for reactivity should be optimized by the end user. Expect a band at approximately 37 kDa in Western Blots of specific cell lysates and tissues. |
| <b>Assay Dilutions:</b>     | All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.                                                                                                                                                                                          |
| <b>ELISA:</b>               | 1:10,000                                                                                                                                                                                                                                                                                 |
| <b>IF:</b>                  | 10 µg/mL                                                                                                                                                                                                                                                                                 |
| <b>IHC:</b>                 | 2 µg/mL                                                                                                                                                                                                                                                                                  |
| <b>WB:</b>                  | 1 µg/mL                                                                                                                                                                                                                                                                                  |

## Formulation

|                        |                                                         |
|------------------------|---------------------------------------------------------|
| <b>Physical State:</b> | Liquid (sterile filtered)                               |
| <b>Concentration:</b>  | 1 mg/mL by UV absorbance at 280 nm                      |
| <b>Buffer:</b>         | 0.01 M Sodium Phosphate, 0.25 M Sodium Chloride, pH 7.2 |
| <b>Preservative:</b>   | 0.02% (w/v) Sodium Azide                                |
| <b>Stabilizer:</b>     | None                                                    |

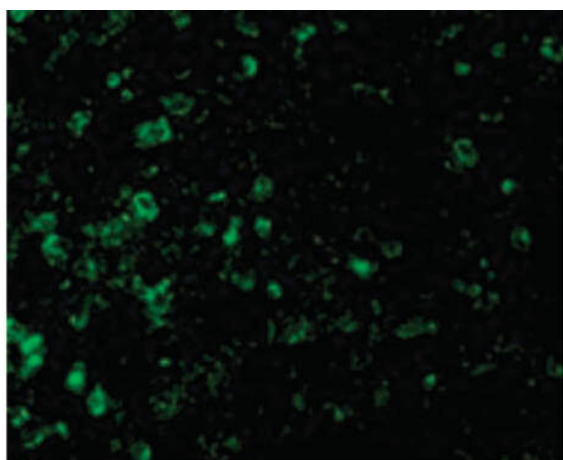
## Shipping & Handling

|                            |         |
|----------------------------|---------|
| <b>Shipping Condition:</b> | Dry Ice |
|----------------------------|---------|

**Storage Condition:** Store vial at -20° C prior to opening. Aliquot contents and freeze at -20° C or below for extended storage. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4° C as an undiluted liquid. Dilute only prior to immediate use.

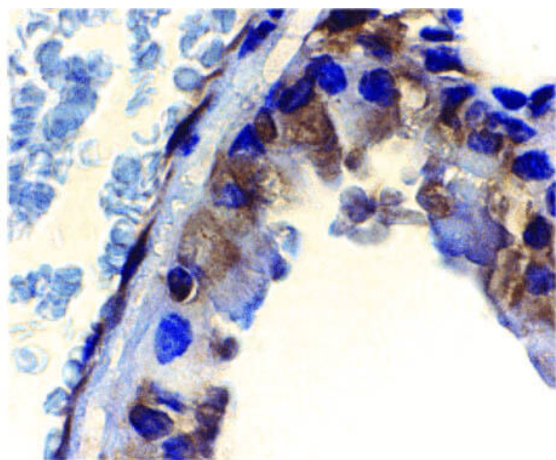
**Expiration:** Expiration date is one (1) year from date of receipt.

## Images



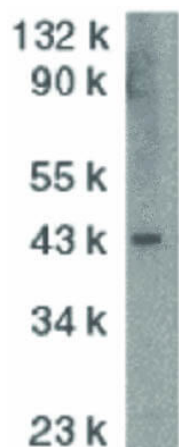
### Immunofluorescence Microscopy

Immunofluorescence Microscopy of ICAD antibody. Tissue: Mouse lung. Fixation: 0.5% PFA. Antigen retrieval: not required. Primary antibody: ICAD antibody at 10 µg/mL for 1 h at RT. Secondary antibody: Fluorescein rabbit secondary antibody at 1:10,000 for 45 min at RT. Localization: ICAD is nuclear and cytoplasmic. Staining: ICAD as green fluorescent signal.



### Immunohistochemistry

Immunohistochemistry of ICAD antibody. Tissue: Mouse lung. Fixation: formalin fixed paraffin embedded. Antigen retrieval: not required. Primary antibody: ICAD antibody at 2 µg/mL for 1 h at RT. Secondary antibody: Peroxidase rabbit secondary antibody at 1:10,000 for 45 min at RT. Localization: ICAD is nuclear and cytoplasmic. Staining: ICAD as precipitated red signal with hematoxylin purple nuclear counterstain.

**Western Blot**

Western Blot of ICAD Antibody. Lane 1: Mouse lung tissue.  
Load: 35 µg per lane. Primary antibody: ICAD Antibody at 1 µg/mL for overnight at 4°C. Secondary antibody: Peroxidase rabbit secondary antibody at 1:10,000 for 45 min at RT.  
Block: 5% BLOTTO overnight at 4°C. Predicted/Observed size: 36.6kDa, 43 kDa for ICAD.

**Disclaimer**

This product is for research use only and is not intended for therapeutic or diagnostic applications. Please contact a technical service representative for more information. All products of animal origin manufactured by Rockland Immunochemicals are derived from starting materials of North American origin. Collection was performed in United States Department of Agriculture (USDA) inspected facilities and all materials have been inspected and certified to be free of disease and suitable for exportation. All properties listed are typical characteristics and are not specifications. All suggestions and data are offered in good faith but without guarantee as conditions and methods of use of our products are beyond our control. All claims must be made within 30 days following the date of delivery. The prospective user must determine the suitability of our materials before adopting them on a commercial scale. Suggested uses of our products are not recommendations to use our products in violation of any patent or as a license under any patent of Rockland Immunochemicals, Inc. If you require a commercial license to use this material and do not have one, then return this material, unopened to: Rockland Inc., P.O. BOX 5199, Limerick, Pennsylvania, USA.