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Datasheet for 600-401-Y67

# ASC Antibody

## Overview

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| **Description:** | Anti-ASC (RABBIT) Antibody - 600-401-Y67 |
| **Item No.:** | 600-401-Y67 |
| **Size:** | 100 µg |
| **Applications:** | ELISA, IHC, WB |
| **Reactivity:** | Human |
| **Host Species:** | Rabbit |

## Product Details

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| **Background:** | Apoptosis is regulated by death domain (DD) and/or caspase recruitment domain (CARD) containing molecules and a caspase family of proteases. CARD containing cell death regulators include RAIDD, RICK, BCL10, Apaf-1, ARC, caspase-9, and caspase-2. A novel CARD domain containing protein was recently identified in human and mouse and designated ASC and TMS1. Ectopic expression of ASC/TMS1 induced apoptosis through activation of caspase-9 and inhibited the survival of human breast cancer cells (3, 4). Overexpression of ASC/TMS1 induced DNA fragmentation. ASC/TMS1 is expressed in a variety of human and mouse tissues. |
| **Synonyms:** | ASC Antibody, ASC, TMS, TMS1, CARD5, TMS-1, ASC, Apoptosis-associated speck-like protein containing a CARD, Caspase recruitment domain-containing protein 5, hASC |
| **Host Species:** | Rabbit |
| **Clonality:** | Polyclonal |
| **Format:** | IgG |

## Target Details

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| **Gene Name:** | PYCARD |
| **Reactivity:** | Human |
| **Immunogen Type:** | Conjugated Peptide |
| **Immunogen:** | Anti-ASC antibody was prepared from whole rabbit serum produced by repeated immunizations with a 14 amino acid peptide near the C-terminus of human ASC. The immunogen is located within the last 50 amino acids of ASC. |

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| **Purity/Specificity:** | Anti-ASC Antibody was affinity purified from monospecific antiserum by immunoaffinity chromatography. Cross reactivity with ASC from other sources has not been determined. Predicted species reactivity based on immunogen sequence: Mouse (57%), Rat (57%). |
| **Relevant Links:** | • UniProtKB - Q9ULZ3<br>• GeneID - 29108<br>• NCBI - BAA87339 |

## Application Details

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| **Tested Applications:** | ELISA, IHC, WB |
| **Application Note:** | Anti-ASC Antibody has been tested for use in ELISA, Western Blotting, Immunohistochemistry-P, and Immunocytochemistry. Specific conditions for reactivity should be optimized by the end user. Expect a band at approximately 22 kDa in Western Blots of specific cell lysates and tissues. Positive controls used are HL60 cells, human spleen tissues, and THP-1 cells. |
| **Assay Dilutions:** | All assays should be optimized by the user. Recommended dilutions (if any) may be listed below. |
| **ELISA:** | 1:10,000 |
| **IHC:** | 2.5µg/mL |
| **WB:** | 1 µg/mL |

## Formulation

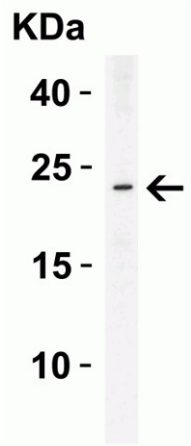
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| **Physical State:** | Liquid (sterile filtered) |
| **Concentration:** | 1.0mg/ml by UV absorbance at 280 nm |
| **Buffer:** | 0.01 M Sodium Phosphate, 0.25 M Sodium Chloride, pH 7.2 |
| **Preservative:** | 0.02% (w/v) Sodium Azide |
| **Stabilizer:** | None |

## Shipping & Handling

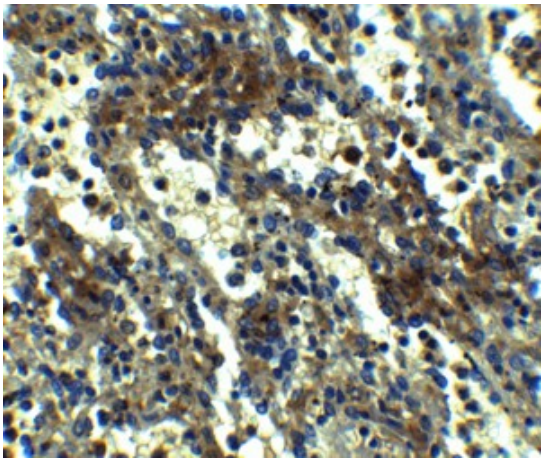
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| **Shipping Condition:** | Dry Ice |
| **Storage Condition:** | Store vial at -20° C prior to opening. Aliquot contents and freeze at -20° C or below for extended storage. Avoid cycles of freezing and thawing. Centrifuge product if not completely 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.

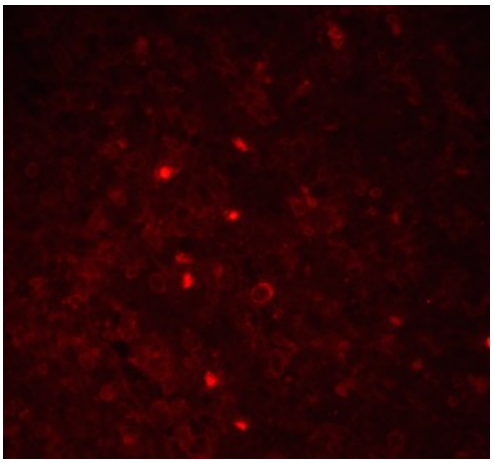
## Images



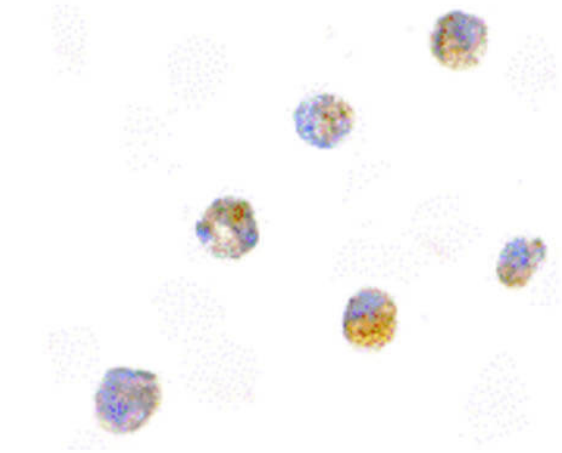

**Western Blot**
Western Blot Validation in Human THP-1 Cells. Loading: 15 µg of lysate per lane. Antibodies: ASC, (2 µg/mL), 1h incubation at RT in 5% NFDM/TBST. Secondary: Goat anti-rabbit IgG HRP conjugate at 1:10000 dilution.



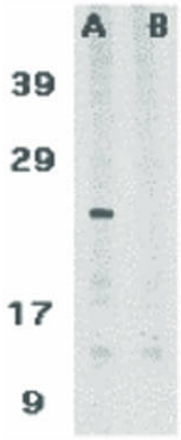
**Immunohistochemistry**
Immunohistochemistry Validation of ASC in Human Spleen Tissue. Immunohistochemical analysis of paraffin-embedded human spleen tissue using anti-ASC antibody at 2.5 µg/ml. Tissue was fixed with formaldehyde and blocked with 10% serum for 1 h at RT; antigen retrieval was by heat mediation with a citrate buffer (pH6). Samples were incubated with primary antibody overnight at 4°C. A goat anti-rabbit IgG H&L (HRP) at 1/250 was used as secondary. Counter stained with Hematoxylin.



**Immunofluorescence Microscopy**
Immunofluorescence Validation of ASC in Human Spleen Tissue. Immunofluorescent analysis of 4% paraformaldehyde-fixed Human Spleen Tissue labeling ASC at 20 µg/mL, followed by goat anti-rabbit IgG secondary antibody at 1/500 dilution (red).



**Immunocytochemistry**
Immunocytochemistry of ASC antibody. Cells: HL60 cells. Fixation: formalin fixed paraffin embedded. Antigen retrieval: not required. Primary antibody: ASC antibody at 5 µg/mL for 1 h at RT. Secondary antibody: Peroxidase rabbit secondary antibody at 1:10,000 for 45 min at RT. Localization: ASC is nuclear, cytoplasmic, and is also localized in the endoplasmic reticulum and mitochondria. Staining: ASC as precipitated light brown signal with hematoxylin blue nuclear counterstain.




**Western Blot**
Western Blot of ASC antibody. Lane 1: HL60 whole cell lysate. Lane 2: HL60 whole cell lysate in the presence of blocking peptide. Load: 35 µg per lane. Primary antibody: ASC 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: 21.6 kDa, 24 kDa for ASC.

## Disclaimer

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