



ASC Rabbit mAb

Catalog No	YP-rAb-17096
Isotype	IgG
Reactivity	Human
Applications	WB,IHC,IF,ELISA
Gene Name	PYCARD
Protein Name	Apoptosis-associated speck-like protein containing a CARD
Purification Process	Protein A
Specificity	Endogenous
Formulation	PBS, 50% glycerol, 0.05% Proclin 300, 0.05%BSA
Source	Monoclonal, Rabbit,IgG
Dilution	IHC 1:1000-1:5000; WB 1:1000-1:5000; IF 1:200-1:1000; ELISA 1:5000-1:20000; Note: For IHC, we suggest antigen retrieval with TE buffer pH 9.0
Concentration	0.5 mg/ml
Purity	≥90%
Storage Stability	-15 ° C to -25 ° C/1 year(Do not lower than -25 ° C)
Synonyms	PYCARD ; ASC ; CARD5 ; TMS1 ; Apoptosis-associated speck-like protein containing a CARD ; hASC ; Caspase recruitment domain-containing protein 5 ; PYD and CARD domain-containing protein ; Target of methylation-induced silencing 1
Observed Band	22kD
Calculated Molecular Weight	22kD
Cell Pathway	Cytoplasm, Nucleus
Tissue Specificity	Widely expressed at low levels. Detected in peripheral blood leukocytes, lung, small intestine, spleen, thymus, colon and at lower levels in placenta, liver and kidney. Very low expression in skeletal muscle, heart and brain. Expressed in lung epithelial cells (at protein level) (PubMed:23229815). Detected in the leukemia cell lines HL-60 and U-937, but not in Jurkat T-cell lymphoma and Daudi Burkitt's lymphoma. Detected in the melanoma cell line WM35, but not in WM793. Not detected in HeLa cervical carcinoma cells and MOLT-4 lymphocytic leukemia cells.
Function	Domain:Interacts with CIAS1/PYPAF1 and PYDC1 via the DAPIN domain.,Function:Promotes caspase-mediated apoptosis. This proapoptotic activity is mediated predominantly through the activation of caspase 9. May be a





component of the inflammasome, a protein complex which also includes NALP2, CARD8 and CASP1 and whose function would be the activation of proinflammatory caspases. In breast tumorigenesis, methylation-mediated silencing may affect genes and proteins that act as positive mediators of cell death. PTM: Phosphorylated. similarity: Contains 1 CARD domain. similarity: Contains 1 DAPIN domain. subcellular location: Upstream of caspase activation, a redistribution from the cytoplasm to the aggregates occurs. These appear as hollow, perinuclear spherical, ball-like structures. subunit: Forms complexes with other DAPIN domain-containing proteins. Interacts with CIAS1/PYPAF1 and PYDC1. tissue specificity: Widely expressed at low levels. Detected in peripheral blood leukocytes, lung, small intestine, spleen, thymus, colon and at lower levels in placenta, liver and kidney. Very low expression in skeletal muscle, heart and brain. Detected in the leukemia cell lines HL-60 and U937, but not in Jurkat T-cell lymphoma and Daudi Burkitt's lymphoma. Detected in the melanoma cell line WM35, but not in WM793. Not detected in HeLa cervical carcinoma cells and Molt 4 lymphocytic leukemia cells.

Background

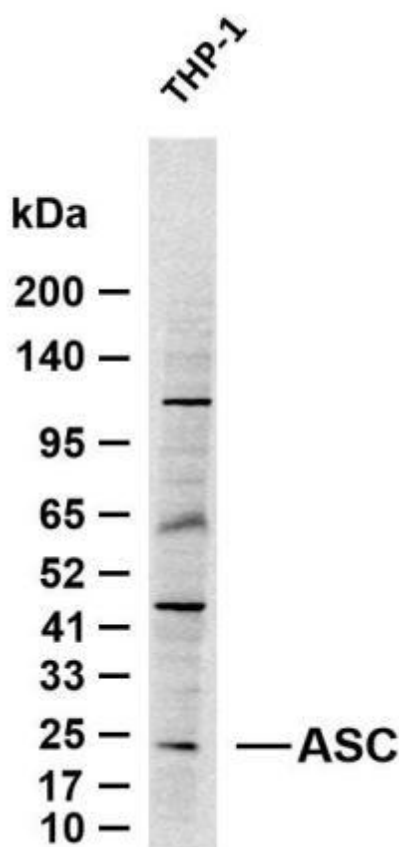
This gene encodes an adaptor protein that is composed of two protein-protein interaction domains: a N-terminal PYRIN-PAAD-DAPIN domain (PYD) and a C-terminal caspase-recruitment domain (CARD). The PYD and CARD domains are members of the six-helix bundle death domain-fold superfamily that mediates assembly of large signaling complexes in the inflammatory and apoptotic signaling pathways via the activation of caspase. In normal cells, this protein is localized to the cytoplasm; however, in cells undergoing apoptosis, it forms ball-like aggregates near the nuclear periphery. Two transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Jul 2008]

matters needing attention

Avoid repeated freezing and thawing!

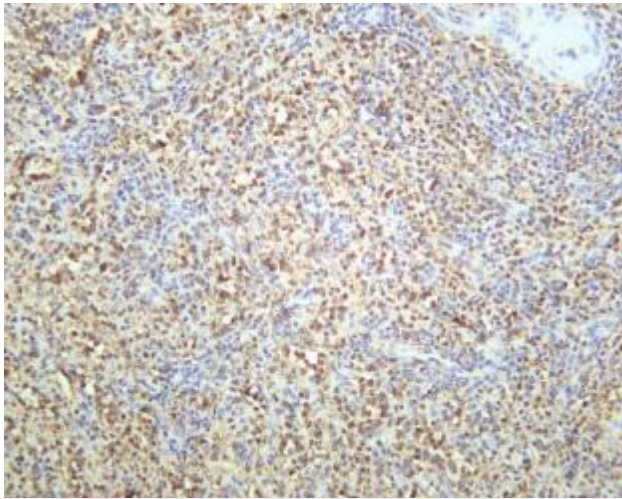
Usage suggestions

This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

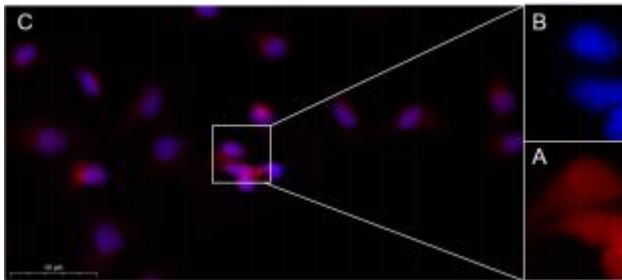


Various whole cell lysates were separated by 4-20% SDS-PAGE, and the membrane was blotted with anti-ASC antibody. The HRP-conjugated Goat anti-Rabbit IgG (H + L) antibody was used to detect the antibody. Lane 1: THP-1 Predicted band size: 22kDa Observed band size: 22kDa





Human spleen was stained with anti-ASC Rabbit antibody



Immunofluorescence analysis of HeLa. Picture A: ASC Rabbit mAb (red). Picture B: DAPI (blue). Picture C: Merge of A+B

