**Applications** 

WB,IHC,IF,ELISA



# **ASC Rabbit pAb**

CatalogNo: YT0365 Orthogonal Validated 💽

#### **Key Features**

Host Species Reactivity

Rabbit
 Human, Mouse, Rat

MW Isotype
• 21kD (Observed) • IgG

#### Recommended Dilution Ratios

WB 1:500-1:2000 IHC 1:100-1:300 IF 1:200-1:1000 ELISA 1:40000

Not yet tested in other applications.

#### Storage

Storage\* -15°C to -25°C/1 year(Do not lower than -25°C)

**Formulation** Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.

#### **I** Basic Information

**Clonality** Polyclonal

## Immunogen Information

**Immunogen** The antiserum was produced against synthesized peptide derived from human ASC. AA

range:10-59

**Specificity** ASC Polyclonal Antibody detects endogenous levels of ASC protein.

## | Target Information

Gene name

**PYCARD** 

**Protein Name** 

Apoptosis-associated speck-like protein containing a CARD

Organism	Gene ID	UniProt ID
Human	<u>29108;</u>	<u>Q9ULZ3;</u>
Mouse	<u>66824</u> ;	<u>Q9EPB4;</u>

#### Cellular Localization

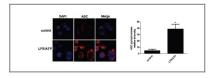
Cytoplasm . Inflammasome . Endoplasmic reticulum . Mitochondrion . Nucleus . Upstream of caspase activation, a redistribution from the cytoplasm to the aggregates occurs. These appear as hollow, perinuclear spherical, ball-like structures (PubMed:11103777, PubMed:12191486, PubMed:15030775). Upon NLRP3 inflammasome activation redistributes to the perinuclear space localizing to endoplasmic reticulum and mitochondria (PubMed:12191486, PubMed:15030775). Localized primarily to the nucleus in resting monocytes/macrophages and rapidly redistributed to the cytoplasm upon pathogen infection (PubMed:19234215). Localized to large cytoplasmic aggregate appearing as a speck containing AIM2, PYCARD, CASP8 and bacterial DNA after infection with Francisella tularensis (By similarity). .; Golgi apparatus membrane . (Microbial infection) Upon HRSV infection, the protein is mainly located in lipid rafts in the Golgi membrane. .

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.

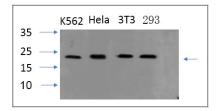
#### **Function**

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., miscellaneous: 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..

## **I** Validation Data



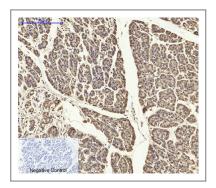
Wu, Dong-Dong, et al. "Inhibition of alveolar macrophage pyroptosis reduces lipopolysaccharide-induced acute lung injury in mice." Chinese medical journal 128.19 (2015): 2638.



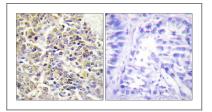
Western Blot analysis of various cells using primary antibody diluted at  $1:1000(4^{\circ}\text{C overnight})$ . Secondary antibody:Goat Anti-rabbit IgG IRDye 800( diluted at 1:5000,  $25^{\circ}\text{C}$ , 1 hour). Cell lysate was extracted by Minute Membrane Protein Isolation and Cell Fractionation Kit(SM-005, Inventbiotech,MN,USA).



Immunohistochemical analysis of paraffin-embedded Human-liver tissue. 1,ASC Polyclonal Antibody was diluted at 1:200(4°C,overnight). 2, Sodium citrate pH 6.0 was used for antibody retrieval(>98°C,20min). 3,Secondary antibody was diluted at 1:200(room tempeRature, 30min). Negative control was used by secondary antibody only.



Immunohistochemical analysis of paraffin-embedded Human-stomach-cancer tissue. 1,ASC Polyclonal Antibody was diluted at 1:200(4°C,overnight). 2, Sodium citrate pH 6.0 was used for antibody retrieval(>98°C,20min). 3,Secondary antibody was diluted at 1:200(room tempeRature, 30min). Negative control was used by secondary antibody only.



Immunohistochemistry analysis of paraffin-embedded human lung carcinoma tissue, using ASC Antibody. The picture on the right is blocked with the synthesized peptide.

#### **Contact information**

Orders: order@immunoway.com
Support: tech@immunoway.com

Telephone: 877-594-3616 (Toll Free), 408-747-0185

Website: http://www.immunoway.com

Address: 2200 Ringwood Ave San Jose, CA 95131 USA



Please scan the QR code to access additional product information: **ASC Rabbit pAb**