

Rabbit Asc Polyclonal Antibody | anti-Asc antibody

Asc (Tyr-144), phospho-specific Antibody

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA71570	Rabbit	Human, Rat, Mouse	Immunocytochemistry, ELISA, Western Blot

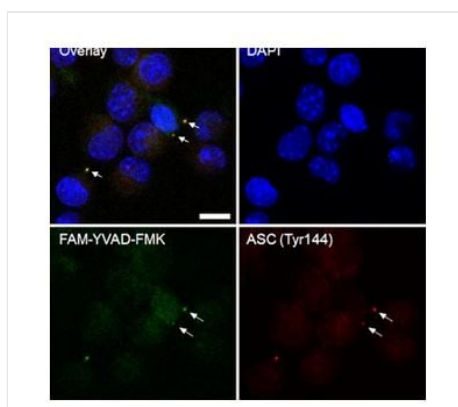
PRODUCT SYNONYMS

Asc; Polyclonal Antibody; Asc (Tyr-144); phospho-specific Antibody; phospho-specific; anti-Asc antibody

PRODUCT SPECIFICATIONS

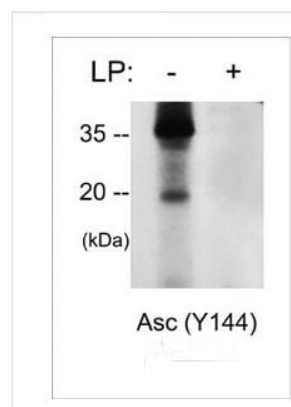
Host	Rabbit
Reactivity	Human, Rat, Mouse
Clonality	Polyclonal
Specificity	This antibody was cross-adsorbed to unphosphorylated Asc (Tyr-144) peptide before affinity purification using phospho-Asc (Tyr-144) peptide (without carrier). The antibody detects phosphorylated Asc (Tyr-144) in the inflammasome. In J774 macrophage cells primed with LPS and treated with nigericin, the antibody colocalized with an inflammasome marker, caspase-1 inhibitor (FAM-YVAD-FMK). In addition, the antibody detects a 20kDa Asc protein in western blots of J774A.1 mouse macrophages treated with pervanadate.
Form/Format	Rabbit polyclonal, affinity-purified antibody is supplied in 100ul phosphate-buffered saline, 50% glycerol, 1mg/ml BSA, and 0.05% sodium azide.
Applicable Applications for anti-Asc antibody	ICC (Immunocytochemistry), ELISA, WB (Western Blot)
Immunogen	Asc (Tyr-144) phospho-peptide (coupled to KLH) corresponding to amino acid residues surrounding Tyr-144 in mouse Asc. This peptide sequence is highly conserved in human and rat Asc.
Preparation and Storage	Store at -20 degree C. Stable for 1 year.

IMAGES



ICC (Immunocytochemistry)

Immunocytochemical labeling of Asc (Tyr-144) in inflammasomes. Paraformaldehyde fixed J774 cells were primed with LPS and treated with nigericin. Cells were co-labeled with DAPI, a caspase-1 inhibitor (FAM-YVAD-FMK), and anti-Asc (Tyr-144) phosphospecific antibody detected with AlexaFluor 568 secondary. (Image provided by Jordan Yaron, Center for Biosignatures Discovery Automation, Arizona State University)



WB (Western Blot)

Western blot analysis of mouse macrophage J774A.1 cells stimulated with pervanadate (1mM for 30 min.), then untreated (-) or treated (+) with alkaline phosphatase. The blot was probed with rabbit polyclonal anti-Asc (Tyr-144) phospho-specific antibody (AP5631) at 1:500.

ADDITIONAL INFORMATION

Related Product Information for anti-Asc antibody	Host- and pathogen-associated cytoplasmic double-stranded DNA triggers the activation of a NALP3-independent inflammasome, which activates caspase-1, leading to maturation of pro-interleukin-1beta and inflammation. Several studies have isolated AIM2 (absent in melanoma 2) as a candidate cytoplasmic-DNA-sensing protein that contains an N-terminal pyrin domain and C-terminal oligonucleotide binding domain. A screen for transcripts induced by interferon-beta identified AIM2 gene expression. AIM2 protein bound double-stranded DNA, recruited the inflammasome adaptor ASC, and localized to ASC containing speckles. AIM2 and ASC form a pyroptosome, which induces pyroptotic cell death mediated by caspase-1. Asc can be phosphorylated at Tyr-144 in a Syk and JNK-dependent manner. This phosphorylation is critical for Asc speck formation and Caspase-1 activation.
References	Hara, H. et al. (2013) Nature Immunol. 14(12):1247. Roberts, T.L. et al. (2009). Science. 323(5917):1057. Bürckstümmer, T. et al. (2009). Nat Immunol. 10(3):266.

NCBI AND UNIPROT INFORMATION

NCBI GI #	165377185
NCBI GeneID	66824
NCBI Accession #	NP_075747.3
NCBI GenBank Nucleotide #	NM_023258.4
UniProt Accession #	Q9EPB4; Q9D2W9
Molecular Weight	21,459 Da
NCBI Official Full Name	apoptosis-associated speck-like protein containing a CARD
NCBI Official Synonym Full Names	PYD and CARD domain containing
NCBI Official Symbol	Pycard
NCBI Official Synonym Symbols	Asc; TNS1; masc; CARD5; TMS-1; 9130417A21Rik
NCBI Protein Information	apoptosis-associated speck-like protein containing a CARD
UniProt Protein Name	Apoptosis-associated speck-like protein containing a CARD
UniProt Gene Name	Pycard
UniProt Synonym Gene Names	Asc; mASC
UniProt Entry Name	ASC_MOUSE

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/polyclonal/asc-antibody-immunocytochemistry-western-blot-elisa/71570>