

#### ARG66211 anti-ASC / TMS1 antibody

Package: 100 μl Store at: -20°C

## Summary

Product Description	Rabbit Polyclonal antibody recognizes ASC / TMS1
Tested Reactivity	Hu, Ms
Predict Reactivity	Rat
Tested Application	WB
Host	Rabbit
Clonality	Polyclonal
Isotype	lgG
Target Name	ASC / TMS1
Species	Human
Immunogen	Fusion protein of Human ASC / TMS1.
Conjugation	Un-conjugated
Alternate Names	Apoptosis-associated speck-like protein containing a CARD; TMS; PYD and CARD domain-containing protein; hASC; ASC; TMS-1; TMS1; Caspase recruitment domain-containing protein 5; Target of methylation-induced silencing 1; CARD5

# **Application Instructions**

Application table	Application	Dilution
	WB	1:500 - 1:2000
Application Note	* The dilutions indicate recomme should be determined by the scie	nded starting dilutions and the optimal dilutions or concentrations ntist.
Positive Control	HL60, A549, Raji and RAW264.7 c	ells.

## Properties

Form	Liquid
Purification	Affinity purification with immunogen.
Buffer	PBS (pH 7.4), 0.05% Sodium azide and 40% Glycerol.
Preservative	0.05% Sodium azide
Stabilizer	40% Glycerol
Concentration	1.28 mg/ml
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.

## Bioinformation

Gene Symbol	PYCARD
Gene Full Name	PYD and CARD domain containing
Background	ASC / TMS1 is an adaptor protein. It 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]
Function	ASC / TMS1 functions as key mediator in apoptosis and inflammation. Promotes caspase-mediated apoptosis involving predominantly caspase-8 and also caspase-9 in a probable cell type-specific manner. Involved in activation of the mitochondrial apoptotic pathway, promotes caspase-8-dependent proteolytic maturation of BID independently of FADD in certain cell types and also mediates mitochondrial translocation of BAX and activates BAX-dependent apoptosis coupled to activation of caspase-9, -2 and -3. Involved in macrophage pyroptosis, a caspase-1-dependent inflammatory form of cell death and is the major constituent of the ASC pyroptosome which forms upon potassium depletion and rapidly recruits and activates caspase-1. In innate immune response believed to act as an integral adapter in the assembly of the inflammasome which activates caspase-1 leading to processing and secretion of proinflammatory cytokines. The function as activating adapter in different types of inflammasomes is mediated by the pyrin and CARD domains and their homotypic interactions. Required for recruitment of caspase-1 to inflammasomes containing certain pattern recognition receptors, such as NLRP2, NLRP3, AIM2 and probably IFI16. In the NLRP1 and NLRC4 inflammasomes seems not be required but facilitates the processing of procaspase-1. In cooperation with NOD2 involved in an inflammasome-mediated maturation of interleukin-1 beta. In collaboration with AIM2 which detects cytosolic double-stranded DNA may also be involved in a caspase-1-independent cell death that involves caspase-8. In adaptive immunity may be involved in maturation of cytokines and caspase-8 involved in post-transcriptional regulation of the guanine nucleotide exchange factor DOCK2; the latter function is proposed to involve the nuclear form. Also involved in transcriptional activation shave been reported. Modulates NF-kappa-8 induction at the level of the IKK complex by inhibiting functions have been reported. Modulates NF-kappa-4 induced in NF-kappa-8 activation and activati
Highlight	Related Antibody Duos and Panels: <u>ARG30331 NLRP3 Inflammasome Antibody Panel</u> <u>ARG30332 NLRC4 Inflammasome Antibody Panel</u> Related products: <u>TMS1 antibodies; TMS1 Duos / Panels; Anti-Rabbit IgG secondary antibodies;</u> Related news: <u>Exploring Antiviral Immune Response</u> <u>RIP1 activation and pathogenesis of NASH</u>
Research Area	NLRP3 Inflammasome Study antibody; NLRC4 Inflammasome Study antibody
Calculated Mw	22 kDa
РТМ	Phosphorylated.



#### ARG66211 anti-ASC / TMS1 antibody WB image

Western blot: 40  $\mu g$  of HL60, A549, Raji and RAW264.7 cell lysates stained with ARG66211 anti-ASC / TMS1 antibody at 1:500 dilution.