

Product datasheet for **TA336850**

TMS1 (PYCARD) Rabbit Polyclonal Antibody

Product data:

Product Type:	Primary Antibodies
Applications:	FC, ICC/IF, IHC, IP, Simple Western, WB
Recommended Dilution:	Flow (Intracellular): 1 - 2 ug/ml, Immunomicroscopy, Flow Cytometry: 1 - 2 ug/ml, Immunoprecipitation, Western Blot: 2.0 - 4.0 ug/ml, Simple Western: 1:1000, Immunohistochemistry: 1:400, Immunohistochemistry-Paraffin: 1:400, Immunocytochemistry/ Immunofluorescence: 1:40-1:100
Reactivity:	Human, Mouse, Rat
Host:	Rabbit
Clonality:	Polyclonal
Immunogen:	A synthetic peptide made to an N-terminal portion of the human ASC/TMS1 protein (between residues 1-50) [UniProt Q9ULZ3]
Formulation:	PBS with 30% Glycerol, 0.05% Sodium Azide. Store at 4C short term. Aliquot and store at -20C long term. Avoid freeze-thaw cycles.
Concentration:	lot specific
Purification:	Affinity purified
Conjugation:	Unconjugated
Storage:	Store at -20°C as received.
Stability:	Stable for 12 months from date of receipt.
Gene Name:	PYD and CARD domain containing
Database Link:	NP_037390 Entrez Gene 66824 Mouse Entrez Gene 282817 Rat Entrez Gene 29108 Human Q9ULZ3



[View online »](#)

Background: Target of methylation-induced silencing 1 protein, TMS1 (ASC, Pycard) is a 21 kDa cytoplasmic adaptor protein containing 2 protein-protein interaction domains: an N-terminal PYRIN-PAAD-DAPIN domain (PYD) and a C-terminal caspase-recruitment domain (CARD). Both domains are members of the six-helix bundle death domain superfamily. These domains, via caspase activation, mediate the assembly of large signaling complexes that are involved in the apoptotic and inflammatory signaling pathways. During apoptosis TMS1 aggregates near the nuclear periphery as ball-like structures. Recent research suggests that it can modulate MAPK expression by suppressing the DUSP10/MKP5 phosphatase thus allowing the phosphorylation of MAPK by pathogens and toll-like receptor agonists. PMID: 2148701.

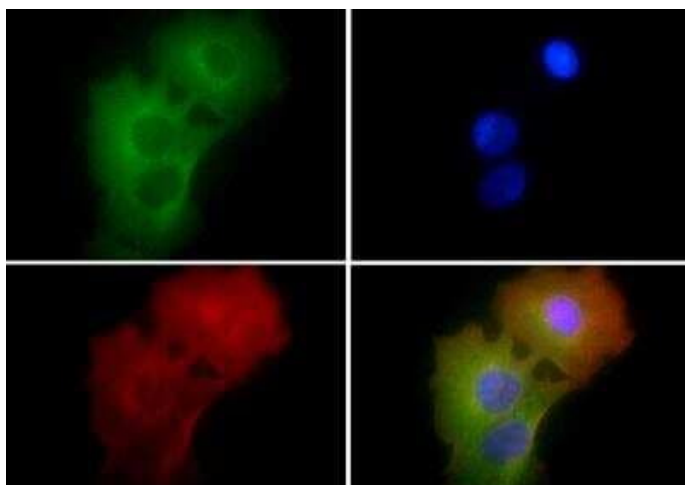
Synonyms: ASC; CARD5; TMS; TMS-1; TMS1

Note: This ASC/TMS1 antibody is useful for Immunocytochemistry/Immunofluorescence and IHC-paraffin embedded sections. Prior to immunostaining paraffin tissues, antigen retrieval with sodium citrate buffer (pH 6.0) is recommended. This antibody is not recommended for Western Blot.

Protein Families: Druggable Genome

Protein Pathways: Cytosolic DNA-sensing pathway, NOD-like receptor signaling pathway

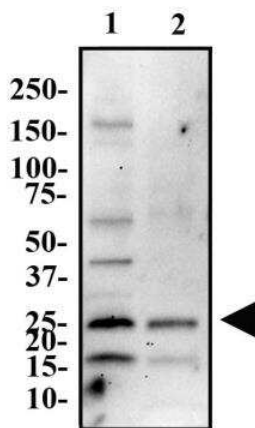
Product images:



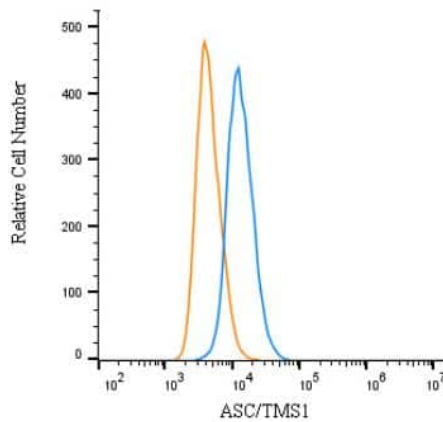
Immunocytochemistry/Immunofluorescence:
ASC/TMS1 Antibody TA336850 - Tested in MCF-7 cells with FITC (green). Nuclei and alpha-tubulin were counterstained with DAPI (blue) and DyLight 550 (red).



Simple Western: ASC/TMS1 Antibody TA336850 - Lane view shows a specific band for ASC TMS1 in 0.5 mg/ml of MCF-7 lysate. This experiment was performed under reducing conditions using the 12-230 kDa separation system.



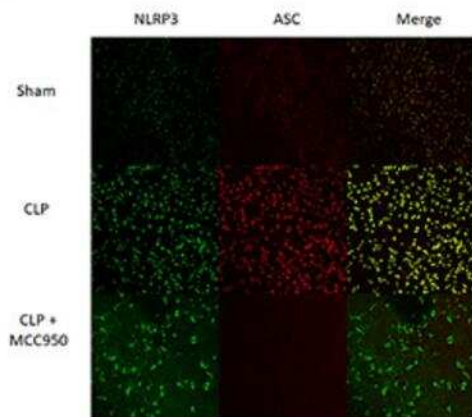
Western Blot: ASC/TMS1 Antibody TA336850 - Whole cell protein from (1) THP1 and (2) HL60 was separated on a 4-15% gel by SDS-PAGE, transferred to 0.2 um PVDF membrane and blocked in 5% non-fat milk in TBST. The membrane was probed with 4.0 ug/ml anti-ACS/TMS1 in 1% milk, and detected with an anti-rabbit HRP secondary antibody using chemiluminescence.



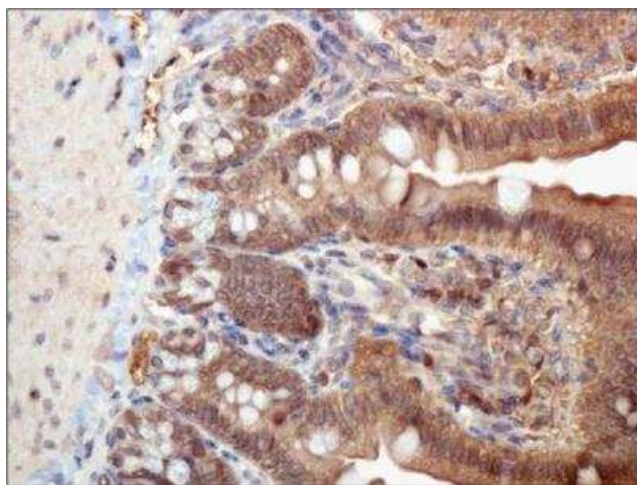
Flow Cytometry: ASC/TMS1 Antibody - BSA Free TA336850 - An intracellular stain was performed on MCF7 cells with ASC/TMS1 TA336850 (blue) and a matched isotype control NBP2-24891 (orange). Cells were fixed with 4% PFA and then permeabilized with 0.1% saponin. Cells were incubated in an antibody dilution of 1 ug/mL for 30 minutes at room temperature, followed by Rabbit IgG (H+L) Cross-Adsorbed Secondary Antibody, Dylight 550 (SA5-10033, Thermo Fisher).

Copyright © 2022 Novus Biologicals

A



Immunocytochemistry/Immunofluorescence: ASC/TMS1 Antibody TA336850 - NLRP3 activation was evaluated by visualizing the co-localization of NLRP3 and apoptosis-associated speck-like protein (ASC) using immunocytochemistry (A). PLoS One. 2020 Jun 17;15(6):e0234039. doi: 10.1371/journal.pone.0234039. (Catalog # TA336850AF647)



Immunohistochemistry: ASC/TMS1 Antibody TA336850 - Tested in mouse intestine at a 1:400 dilution.